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EXCAVATIONS AT
KALIBANGAN
THE EARLY HARAPPANS
(1960-1969)

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MADHU BALA

with contributions from

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FOREWORD

The excavations at Kalibangan in Hanumangarh district of Rajasthan were carried out over 1960-1969 by the Archaeological Survey of India (ASI). This site reveals traces of pre-Harappan/early Harappan culture. Short reports on this excavation were published in the **Indian Archaeology - A Review** from time to time, and it is now my pleasure to present the first detailed report on this excavation entitled **Kalibangan Excavation : The Early Harappans** which has been published by the ASI.

Sri Jagat Pati Joshi, former Director General has co-ordinated the writing of this report, which has contributions from Prof. B.B. Lal, (Late) B.K. Thapar, Ms. Madhu Bala of the ASI and also the (Late) B.B. Lal and Shri B.N. Tandon, (Late) B. Nath of the Anthropological Survey of India, Kolkata; Vishnu Mittre and Dr. R. Savithri of the Birbal Sahani Institute of Palaeobotany, Lucknow.

I thank the authors and the co-ordinator for completing this task, which throws light on the formative period of the early Harappans.

I would like to place on record my appreciation of the Publication Section of the ASI for their co-operation in bringing out this publication. My special thanks to Dr B.R. Mani (Superintending Archaeologist), Dr (Miss) Arundhati Banerji (Dy. Superintending Archaeologist), Shri Hoshiar Singh (Production Officer), Dr Piyush Bhatt and Smt. Archana Asthana (Asstt. Archaeologists) who have been working on this report for over a year with unflagging zeal and enthusiasm.

Director General
Archaeological Survey of India

New Delhi
June 12, 2003

PREFACE

Excavations at Kalibangan were started during the field-season of 1960-61 by the present writer, as the Director of the School of Archaeology (now designated as Institute of Archaeology). During the following field-season he was away in Egypt, leading an Indian team which carried out excavations at Afyeh and Tumus in Nubia, under a UNESCO project. However, excavations were continued at Kalibangan by Shri B.K.Thapar, as Superintendent of the Excavations Branch of the Survey. By the 1962-63 season the writer was back from Egypt, and the work was carried out under the joint direction of himself and Shri Thapar. This joint supervision continued up to the field-season of 1967-68. During 1968-69, however, Shri Jagat Pati Joshi, as Superintendent of the Excavations Branch, also joined hands in the direction of the excavations. With this season, which was ninth in the series, the fieldwork came to an end.

In 1972 the writer took voluntary retirement from the post of the Director General of the Survey and joined Jiwaji University, Gwalior, as Professor and Head of the School of Ancient Indian History, Culture and Archaeology. During the summer vacation at the university in 1973, he came to Delhi with the specific objective of writing the report on the excavations at Kalibangan. He wanted to begin the work by analysing the data regarding the seals. The idea was to find out if seals with a given motif occurred in any particular context or not. And if they did, what could be its implications. He had already made some eye-copies of the seals during the fieldwork. All that he wanted was to examine the plans and sections of the trenches wherein the seals concerned had been found. He requested the authorities to make the relevant drawings available to him. He waited for more than a month, sweating in the sultry room at the Survey's Safdarjang office, but nothing was done. Excuses of one kind or another were produced. Completely disappointed, he had to go back to Gwalior, informing the authorities of the situation and adding that as and when the records were made available he would come back and resume the work. That day never came and report-writing was thus at a standstill for quite some time.

It must go to the credit of Shri Jagat Pati Joshi that in 1987 he set up a Cell, under the supervision of Ms Madhu Bala, to put together all the Kalibangan material and records. She began her work with the pottery and later took up other items as well. In 1988 Shri B.K.Thapar, who had long retired from the Survey and was working as the Secretary of Indian National Trust for Art and Cultural Heritage, was appointed a Consultant by the Survey for writing the Kalibangan report. He held that post for nearly two years, during which he wrote two chapters, one dealing with the environment and climate of the region in ancient times and the other with the discovery of the site and previous work thereat, both of which are included here. But no headway was made about the report as such. It is only during recent years that a concerted attempt has been made to see that at least a report on the Period I settlement at the site (called variously Pre-Harappan or Early Harappan) is finalized and made press-ready, thanks to a renewed effort by Shri Jagat Pati Joshi. He has been good enough to ask me to contribute certain chapters, which I have gratefully done.

While going through this volume, the reader may find that the technical reports on pottery, metallic objects, animal bones and plant remains sent to us by the respective experts, have been included here *in toto,* though the material belongs to both Early and Mature Harappan levels. This has been done to present a composite picture.

In presenting this report to readers, so many years after the excavations, we feel really small, nay even ashamed. The only umbrella under which we can cover our heads is the saying 'Better late than never'. We hope that the academic community will accept this much-belated report for whatever it is worth.

New Delhi
10th Oct. 2000

B.B.Lal

ACKNOWLEDGMENT

In a project covering nine seasons, it is obvious that the directors were assisted by many a person. By some for just one season but by others for more. Thus, in field-supervision valuable assistance was received variously from: Sarvashri N.C. Ghosh, M.D. Khare, C. Margabandhu, J.S. Nigam, B.M. Pande, K. Raghavachari, K.S. Ramachandran, G.V.S. Rao, V.V. Rao, A.K. Sharma, K. Krishnamurty, I.K. Sharma, K. Raghavachari, J.P. Srivastava and K.M. Shrivastava. The survey maps were prepared by Shri S.P. Jain and Shri A.K. Roy, while other drawings were made variously by Sarvashri Ram Babu, J.S. Dubey, L. Dutt, Lalit Jain, Jassu Ram, Amir Singh and Mahendra Singh. From time-to-time the photographic work was attended to by Sarvashri B.P. Asthana, R. Chatterji, V.V. Dutta, Ranjit Gupta, G. Lakshmi Narayan, M.B. Limaye. B.S. Rajput took the photographs of antiquities and pottery. Shri J.R. Batra prepared all the pottery drawings and finalized the drawings of the structures. Sri Vijay Kumar rendered valuable assistance in making the drawings press-ready. Smt. Anjali Negi typed out the entire script on computer and Ms. Mamta Rawat made the charts on the computer. During the course of the preparation of the report assistance has also been received from Sarvashri Manohar Lal, Puran Chand Mukhia, Shiv Dutt Pant, Narinder Kumar Sharma. To every one of the above-mentioned persons we express our deep gratitude.

This work could not have been completed if Late Shri Ajay Shankar, the then Director General and Smt. Komal Anand, the then Director General, Archaeological Survey of India, had not provided the facilities at Purana Qila to the authors. Srimati Kasturi Gupta Menon, the present Director General, took keen interest in its publication and design. The help is gratefully acknowledged.

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B.K. Thapar

A. LOCATION

Kalibangan (29^{0} 29″ N; 74^{0} 8″ E), literally meaning black bangles from the sight of the countless fragments of weather-stained terracotta bangles and nodules, etc., strewn over the surface of the site, lies some 310 km north-west of Delhi, on the left bank of the Ghaggar river (anciently known as the Sarasvati). Located in the northern part of Rajasthan in District Hanumangarh, it can be reached by rail from Pilibangan (covering a distance of about 6 km) on the Hanumangarh-Suratgarh section of the Northern Railway. The ancient remains dominate the landscape from a distance and, on reaching near, reveal themselves into two mounds (pls. II-VI). About half a kilometre southeastwards lies the present village inhabited mostly by displaced persons who migrated to this part of the country from regions across the border consequent upon the partition of the subcontinent in 1947. As coincidence would have it, some of the families seem to have trekked their way from as far as Harappa, from one Indus metropolis to the other, as if continuing the tradition of their forbears of the third millennium BC

B. ENVIRONMENT

Rajasthan is one of the border states of India, sharing with Pakistan on the northwest and west an uninterrupted long political frontier. A significant geographical feature and perhaps the most dominant land form of Rajasthan is Aravalli range of hills which, running in southwest to northeast direction from Idar near Palanpur in Gujarat reaching out (over 690 km) to Delhi, divides the state into two unequal but distinct geographical and cultural units. In fact, they form one of the major Indian watersheds, separating the drainage system of the Bay of Bengal through Ganga system like the Chambal, a tributary of the Yamuna, from that of the Arabian Sea through rivers like Mahi, Sabarmati, etc. In a wider perspective, the Aravalli range forms an effective boundary between the Western Asiatic Perso-Arabian and tropical (Indo-Malayan) patterns of climate and flora. East of this axis is a region (known as Mewar) of varied topography, showing in different areas gnarled rugged countryside dissected plains, inland drainage basins and fertile valley - a queer amalgam of both lowland and upland features. The principal river is the Chambal with its tributaries like Kalisindh, Parbati, and Banas. Rainfall (annual mean) varies from over 100 cm near the hills to 60 cm in the northeast. The Aravallis bordering the area in the east do not form a continuous range but have a number of wind-gaps, particularly near Sambhar salt lake and between Ajmer and Beawar. The sand from the west blows right through these gaps to the other side. West of the axis is a region (known as Marwar or Marusthali, meaning the region of death, hence applied to the desert) of flat alluvial plain, grading into aeoline accumulations of the Great Thar Desert. The area located immediately to the west of the hill-range is a steppe land known as Bagar. Essentially, it is a sandblasted landscape where rainfed agriculture can precariously persist. The region, showing extremes of climate, both seasonal and diurnal, slopes generally from east to west and north to south. Herbaceous vegetation is overwhelmingly dominant in the arid and semicircular belt. The mean annual rainfall, though highly erratic in its incidence, ranges from 10 cm (on the Indo-Pak border towards

the core centring on the Thar desert) to 40 cm (on the eastern edge of the region). The northern parts of Rajasthan receive comparatively more rainfall in the winter months. The monotony of the vast expanse of the flat plain is relived by numerous isolated rocky projections of low undulated elevations and well-marked series of sand-dunes, doubtlessly formed by the sand-drifting action of the southwestern monsoon-winds as well as by the disintegration of the subjacent rocks. The sand hills are higher in the west than in the east where they spread out in a thin veneer to produce the semi-arid transitional plain known as the Pat[1]. This section is characterized by the occurrence of several salt-lakes like Sambhar, Didwana and Kuchaman. The main river is the Luni which with an integrated drainage system of effluents like Sukri and Jawai flows into the Rann of Kuchchh, reaching there only during the rainy season. This river is the first natural barrier against the eastward spread of the sands and as such serves as a demarcation between aridity and humidity. The other rivers are the Sabarmati and Mahi which running westwards of the Luni, flow into the Gulf of Cambay. Besides, there are quite a few streams and torrent-filled *nallas* which carry flowing water only during the monsoon. The beds of some of these streams have become blocked up by blown sand, resulting from aridity, thus providing evidence of past climates. In the northern part of the Pat region lies the Shekhawati tract which is characterized by inland drainage of rivers Kantli, Sabi, Kasauti and Dohan. In the extreme north can be seen the dry-bed of the Ghaggar, popularly known among the local people by its more renowned component, the Sarasvati. The width of its dry-bed which is usually covered with wild shrubs but sometimes absolutely bore of all vegetation, is nowhere lesser than 4-5 kilometres, testifying to the gradual desiccation of a once-fertile region. In the context of our present study particular interest attaches to the hydrographic history of this river, for along its course many protohistoric and historical sites have been located, showing a varying pattern of distribution, indicative of the various stages in the life of the river. The Sarasvati thus claims a special interest for students of ancient geography of India.

The Sarasvati, literally meaning abounding in pools, rises in the Siwalik hills in the region of the junction of the talus fans of the Yamuna on the east and Satluj on the west. After covering a southwesterly course of about 170 kilometres, receiving Markanda as tributary on the way, it is joined at Rasula (near Shatrana) by the river Ghaggar was a torrent-bed, also raising from the same sub-mountain range, not very far from the source of the former river. Below the confluence, the combined course of the two rivers is presently known as the Ghaggar and its continuation further westwards below Fort Abbas, in the erstwhile Bahawalpur State of Pakistan, variously as Hakra Satna, Wahind. After entering Sind, the Hakra turns southwards and anciently flowed into the Rann of Kuchchh through the old riverbed, generally known as Nara. Being at present only rain fed the river has become non-perennial, losing itself in the vast stretches of unconsolidated sediments below Hanumangarh. But its 5-8 km wide dry-bed, composed of rich loamy soil, bordered on either side by continuous lines of sand-dunes, speaks of its past glory as a mighty river. The flooded plain points to a very long period of attenuated seasonal floods with slow build up of sediments. The marginal rides of accumulated sand seem to represent ancient river-banks as indicated by the occurrence on them of fresh water shells

[1] M Pithavalla, "The Great Indian Desert: A Geographical Study", *Bulletin of the Council of National Institute of Science of India*, Vol. I (Calcutta, 1952), pp 137-50

which got deposited on the bank of the river when it was alive[1]. Aurel Stein[2] had, however, argued that the ridges flanking the alluvium are formed due to the wind-borne sand having been stopped by the vegetation (shrub or precarious cultivation) growing in the riverine belt. In support of his arguments he had stated that the sand ridges along the southern or left bank of the dried up river show generally a greater height than those of the opposite bank, the difference obviously being due to the prevailing winds blowing from southwest. These observations notwithstanding, traditional Indian belief recognizes in this well-marked bed the course of the Sarasvati river, mentioned in the Rigvedic hymns, as the best of the rivers *(naditama)*, surpassing in majesty and might all other rivers and flowing into ocean *(yati giribhya a samudrat)*[3]. How the sacred Sarasvati came to lose its name and acquire that of its tributary remains unknown. The description given in the texts, surprisingly does not agree with the present form of the river which with a small amount of annual inundation water to flow sluggishly for a short distance beyond Hanumangarh and is locally known as *nali* (literally, drain). The Ghaggar-Hakra river is thus referred to by various writers as the 'lost Sarasvati'.

The identification of the bed of the Sarasvati has been exercising the minds of the scholars since the last quarter of the nineteenth century. During this period various hypothesis have been postulated on the hydrographic history of this river noteworthy amongst which deserve recapitulation here. C.F. Oldham[4], was of the view that the Satluj, on leaving the hills near Ropar, instead by turning west as at present, anciently took a more southerly direction and joined the Ghaggar-Sarasvati which represented its former bed. According to him Satluj changed its course several times before its capture by the Beas. This observation is supported by the presence of several palaeo-channels, now known as Wah, Sirhand Nadi and the three Naiwals. All these, mostly dry, diverge from the direction of Ropar where the Satluj enters the plains and probably represent in turn the bed of that river. Of these, the first two flowing towards the east, seem to meet the Ghaggar between Sirsa and Hanumangarh while the three Naiwals, after covering a little distance below Abohar, drained into the Ghaggar near Walar. He also postulated that the Yamuna at some remote period may have also joined the Sarasvati, possibly through the present-day channel of Chautang (ancient Drishadvati) meeting the latter near Suratgarh some two kms earlier by R.D. Oldham[5] and later by Gurdev Singh[6]. Burrad and Hayden[7], having studied the Himalayan catchment basin of the Ghaggar felt that 'the Giri flowing between Shamble and Chur peaks and presently a tributary of the Yamuna, could formerly have drained into the Ghaggar. Aurel Stein, while making a

[1] A Ghosh, " The Rajputana Deserts, its Archaeological Aspect", *Bulletin of the Council of National Institute of Science/of India* (Calcutta, 1952), Vol.I, pp. 37-42.

[2] Aurel Stein, *India A Regional Geography* (Varanasi, 1967).

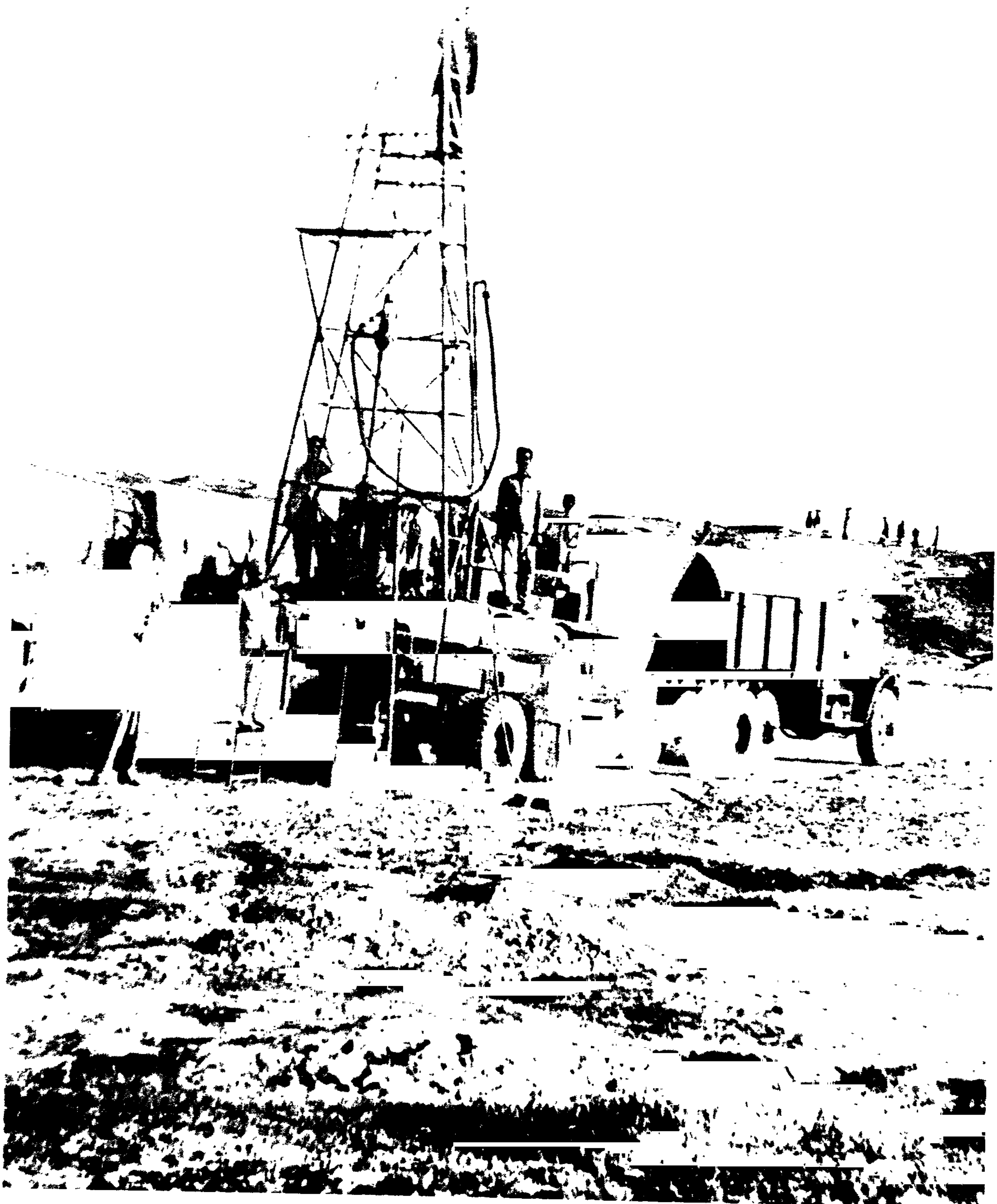
[3] Macdonnell, Arther Antony and Keith, Arthu Berriedale, *Vedic Index of Names and Subjects,* Vol II (London, 1912), pp. 434-435, RV.II, 41, 16; RV.VII, 95, 2.

[4] C.F Oldham, "Notes on the lost river of the Indian Desert", *Journal of the Royal Asiatic Society* (London, 1874), New Series, Vol 25, pp. 49-76.

[5] R.D Oldham, "On Probable Changes in the Geography of the Punjab and its Rivers : An Historical Geography Study", *Journal of The Asiatic Society of Bengal* (1896), No.55, pp. 322-43.

[6] Gurdev Singh, "The Problem of Desiccation of the Jamuna Satluj Divide" (1952), *The Geographer*, Vol. 5 No. 1. Gurdip Singh, R.D Joshi and A.B.Singh, " Stratigraphic and Radiocarbon Evidence for the Age and Development of Three Salt Lake Deposits in Rajasthan, India", *Quaternary Research* (1972), Vol. 2, No.4, pp. 496-505; also G.Singh, R D. Joshi, S.K Chopra and A.B Singh, "Late Quaternary History of Vegetation of Climate of the Rajasthan Desert, India", *Philosophical Transactions of the Royal Society of London*, Vol 267, No. 889 (London, 1974), pp 467-501.

[7] S G.Burrad, H.H.Hayden and A.M.Heron, "Review of the Kumayun Himalaya", *Geography and Geology of the Himalaya Mountains and Tibet* (Calcutta, 1907-8), pp 135-136.



Pl. I *KLB-1 : general view of platform of boring for hydrological investigation.* *See p. 5*

survey of ancient sites along the 'lost Sarasvati' river observed that near Walar a distinct gap between the northern sand-ridges brings the Hakra Branch as the Satluj canal system to the dry riverine belt of Hakra. By a careful study of the topography of the area through which the canal passes, he postulated that the levels between the sand ridges 'unmistakably represent an ancient winding bed of the Satluj that once joined the Hakra between Walar and Bijnor'. He further hinted that the Desert Branch Canal, fed by the main head on the Satluj also follows an ancient shifting bed of that river, joined that Hakra near Kudwala. Below Derawar, he observed, the branching river beds gave a deltaic look. D.N.Wadia[1], while studying the drainage system of north India, felt that Yamuna at one time flowed into the Arabian sea through the now dry-bed of Sarasvati. Robert Raikes[2] during his brief environmental survey of Kalibangan (pl. I) found at a depth of about 11 meters below the present flood plain of the Ghaggar river a coarse sand very similar in mineral content to that formed in the bed of the present day Yamuna, thus confirming the flow of the latter into the bed of the former. On the basis of his field observations he postulated alternating capture of the Yamuna by the Indus and the Ganga System, repeating the phenomenon six times during the period ranging from 2500 BC to AD 500. Herbert Wilhemy[3] during his studies of the geomorphology of the Indus plains, reconstructed the history of the river changes in the region and concluded that before 2000 BC both the Satluj and the Yamuna drained into the Sarasvati. Suraj Bhan[4] during his survey of the Sarasvati and Yamuna valleys identified a westerly palaeo-channel of the Yamuna, traceable from Indri southwestwards through Safedon to Mitathal.

Recently, landsat imagery has been employed to ascertain the palaeo-channels of the Satluj, the Sarasvati and the Yamuna. The imagery relating to the Satluj-Ghaggar and the Yamuna systems, covering Punjab, Haryana and Rajasthan[5] shows the following clearly marked out features : (a) a sudden widening of the Ghaggar valley about 25 km south of Patiala, (b) the confluence near about Shatrana of a major palaeo-channel, starting from Ropar, (c) three palaeo-channels south and southwest of Markanda in which the present Sarasvati, Chautang and Yamuna mostly flow and (d) bifurcation of the ancient Ghaggar-Sarasvati bed near Anupgarh and the termination of both these palaeo-channels some kilometres thereafter. Interpretation of aerial photographs and landsat imagery, combined with field-investigation in the western part of the Jaisalmer District[6] indicates that beyond Anupgarh Sarasvati formerly used to flow through a more easterly course in the

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1 D.N. Wadia, *Geology of India* (New Delhi, 1966).

2 Robert Raikes, "Monsoon Over the Indus Valley During the Harappan Period", *Nature* (1968), Vol. 217, No 5129, pp 628-29. H C.Ray Choudhuri, "The Sarasvati", *Science and Culture*, Vol. VIII, No. 12 (Calcutta, 1943), pp 468-74; H.G.Raverty, "The Mihran of Sind and its Tributaries : A Geographical and Historical Study", *Journal of the Asiatic Society of Bengal* (1892), Vol 61, pp.155-508.

J.W.Barna : 1872, Notes on the Physical Geography of the Bahawalpore State, *Journal of the Royal Geographical Society*, Vol. XLII, pp. 390-408.

3 H.Wilhelmy, *Der Wandernde Strom Studie zur Talgeschichte clus Indus Erdkunde* (1966), Vol. XX pp. 256-76 and *Das Urshromtal am Ostrand der Indusebene Und das Sarasvati Problem, Zeitschrift fur Geomorphologie, Supplementband B,* (1969) pp.76-93

4 Suraj Bhan , "Changes in the Course of Yamuna and their Bearing on the Protohistoric Cultures of Haryana", *Archaeological Congress and Seminar Papers* (ed), S B Deo (Nagpur, 1972), pp 125-28

5 Yash Pal, Baldev Sahai, R K Sood and D P.Agrawal, "Remote Sensing of the 'Lost' Sarasvati River", *Proceedings of the Indian Academy of Sciences* (Earth Planet-Science, 1980), pp 317-31

6 A Ghosh, A Kar and Zahid Hussain," The lost Courses of the Sarasvati River in the Great Indian Desert, New evidence from Landsat Imagery", *The Geographical Journal*, Vol.145 (3) (London, 1979), pp 446-51.

Rajasthan part of the desert with Luni as one of its tributaries. Subsequently, the Sarasvati shifted its course to the west and, losing its contact with Luni, flowed into the Rann of Kachchh first through a channel in the extreme desert terrain of the Jaisalmer District and later through the Raini-Nara-Hakra course in Pakistan.

For the diversion of these rivers various causes have been adduced : (i) tectonic uplift, (ii) capture of the Satluj through headwater erosion, (iii) formation of thick alluvial fans which the Himalayan rivers deposit when they emerge into the plains, (iv) existence of fault and (v) *coriolis* force (deflection force due to the earth's rotation). Among these the last mentioned factor does not seem to hold good, for its effects cannot be localized to a particular river. It is observed that major channels in this region were structurally controlled by enechelon faults with the result that even minor tectonic movements could cause changes in the configuration of the palaeo-channels. It is widely known that the headworks region of the Sarasvati is tectonically unstable. Geomorphological and archaeological studies supported with aerial photographs carried out in the Markanda valley, a tributary of the Sarasvati, indicate the occurrence of strong tectonic movements in late Pleistocene, continuing to mid Holocene. These preliminary studies show that neotectonic movements in the catchment area of the Ghaggar might have played some role in changing the hydrological budget of the Ghaggar[1]. Similarly, a slow upheaval of a range across the bed of the Giri might have caused its deflection from Ghaggar to Yamuna[2]. The slow elevation of the Satluj divide caused a depression westward of the palaeo-channel of the present course of the Satluj testify to this vagrancy of the river.

From the foregoing, it seems certain that both Satluj and Yamuna at one time drained into the Sarasvati and that both have changed their courses several times before occupying their present respective beds. As for Satluj, its confluence with the Ghaggar-Sarasvati-Hakra has been indicated at four places, *viz.* Shatrana, between Sirsa and Hanumangarh, Walar near Fort Abbas and Kudwala, each representing a stage in its westward shift. The coalescence of the waters of Yamuna and Ghaggar-Sarasvati seem to have happened somewhere near Suratgarh, the other meeting points have been obliterated, excepting perhaps with an old course of Sarasvati some 12 km, eastward of Sirsa.

For dating these episodes in the life of these rivers, it would perhaps be expedient to refer to the archaeologically attested evidence. The following cultures have so far been identified in this region :-

1. Pre-Harappan/Early Harappan Culture (*circa* 3000 - 2600 BC)
2. Harappan Culture (*circa* 2600 - 1900 BC)
3. Late Harappan Culture, including the amalgam with Ochre Colour Pottery (*circa* 1900 - 1200 BC)
4. Painted Grey Ware Culture (*circa* 1200 - 800 BC)
5. Rang Mahal Cultures (*circa* AD 200-600)

The extent and distribution of these cultures afford significant clues to the location of the respective riverbeds during a particular time-span.

The Pre-Harappan/Early Harappan sites are located along: (a) the present dry-bed of the Hakra-Ghaggar from Rahimyar Khan to Sirsa[3], (b) the old bed of the Sarasvati east of Sirsa, known as Rangoi Nadi[4], (c) the

[1] B K Thapar, "Climate During the Period of the Indus Civilization", *Ecology and Archaeology of Western India* (eds.), D P Agrawal and B.M Pande (Delhi, 1977), pp. 67-73

[2] S G Burrad, H.H Hayden and A M. Heron : 1907-8, Review of the Kumayun Himalaya, *Geography and Geology of the Himalaya Mountains and Tibet* (Calcutta, 1907-08), pp 135-136

[3] M R Mughal, "New Archaeological Evidence from Bhawalpur" *Indus Civilization New Perspectives* (ed.), Ahmed Hassan Dani (Islamabad, 1981), pp.33-42. A Ghosh, "The Rajputana Deserts, its Archaeological Aspect", *Bulletin of the Council of National Institute of Science of India*, Vol I (Calcutta, 1952), pp. 37-42.

[4] B K Thapar, "The Harappan Civilisation : some reflection on its environments and resources and their exploitation" *Harappan Civilisation A contemporary perspective*, (ed.) Gregory L Possehl (New Delhi, 1982)

palaeo-channels of Satluj like Sirhind Nadi, Wah Patialvi running in the direction of Sirsa, palaeo-channels of Yamuna through Chautang and another dry-bed to its east[1]. It is reasonable to argue, therefore, that during this period both Satluj and Yamuna drained into the Ghaggar-Sarasvati, the former near about Sirsa and the latter nearabout Suratgarh, and that Sarasvati took a slightly southern course than the present.

The Harappan sites show the same pattern of distribution as that of its antecedent culture with the additions that a few sites are also located on the palaeo-channels represented by the Naiwals, running in the direction of Walar. This leads us to surmise that the Satluj had already started shifting westwards during this period, but still draining into Ghaggar-Hakra somewhere around Walar, beyond which distinct traces of the widening of the bed were noticed by Stein.[2]

The Late Harappan Culture, which represents an effete and impoverished stage, devolved out of Harappan and in some case directly out of Pre-Harappan elements, is attested to in all the above mentioned valleys, extending even to the upper course of the present day Satluj valley. The settlements of the culture, representing either single or successor occupations of the Harappan or of Pre-Harappan Culture, generally tend to show a regional distribution : (i) between Derawar Fort and Kudwala on the Hakra in the erstwhile Bahawalpur State of Pakistan[3] and (ii) east of Kalibangan on the Sarasvati and Chautang and the upper course of the Satluj, including the palaeo-channels, the larger number being located in the Sarasvati. Chautang valleys rather than in that of the Satluj[4]. The manifestations of the Late Harappan Culture in both these regions are demonstratively different. While the former represents a Cemetery-H related material, the latter shows an amalgam of emasculated Harappan and decrepit-Pre-Harappan elements, occasionally with admixture of Cemetery-H. An obvious inference drawn from this pattern is that the Late Harappans depleted of their resources, were adjusting themselves to changed environments, thus settling in areas where assured supply of river water was available. It is reasonable to conclude, therefore, that during the Late Harappan period, the Satluj was in the last stage of shifting its course westwards and thus continued contributing some amount of water through its spill channels during the monsoon both to the Hakra region around Kudwala and Derawar Fort and to the upper region, making it thus possible for the settlements of those regions to survive. As regards Yamuna, perhaps a retreating flow-channel was still available to the settlements in the Sarasvati-Drishadvati region. The level nature of the area has been very susceptible to widespread floods.

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1 Suraj Bhan, "Changes in the Course of Yamuna and their Bearing on the Protohistoric Cultures of Haryana" *Archaeological Congress and Seminar Papers* (ed.), S.B.Deo (Nagpur, 1972), pp. 125-28.

2 Aurel Stein, "A Survey of Ancient Sites Along the 'lost' Sarasvati River". *The Geographical Journal*, Vol. XCIX, No.4 (London, 1942), pp. 173-82.

3 M.R. Mughal, "New Archaeological Evidence from Bhawalpur", *Man and Environment*, Vol. 4 (Ahmedabad, 1980), pp.93-98.

4 Suraj Bhan, "The Sequence and Spread of the Prehistoric Cultures in the Upper Sarasvati Basin", *Radiocarbon and Indian Archaeology* (eds.), D.P.Agrawal, and A.Ghosh (Bombay, 1973), pp. 252-63; Suraj Bhan, *Excavations at Mitathal (1968)* and *Other Explorations in Satluj-Yamuna Divide* (Kurukshetra, 1975); Jagat Pati Joshi, *Excavation at Bhagwanpura 1975-76 and Other Explorations & Excavations 1975-81 in Haryana, Jammu & Kashmir and Punjab* (New Delhi, 1993) and

K.N.Dikshit, "Distribution and Relationship of Protohistoric Sites Along Old River-Channels of the Ghaggar-System", *Ecology and Archaeology of Western India* (eds), D.P.Agrawal and B.M Pande (New Delhi, 1977), pp.51-56.

The sites of the Painted Grey Ware Cultures, as far as the above-mentioned regions are concerned, excepting those which overlie Harappan (Ropar) or Late Harappan (Bhagwanpura, Dadheri) occupations, are situated in the middle of the Sarasvati-Ghaggar-Hakra bed[1], signifying a dwindling water supply in a narrower channel of the river which was evidently becoming dry due to the capture of the perennial Satluj by the Beas, and the Yamuna by the Ganga. The settlements in this region, which essentially were unpretentious, were sustained by the rainfall in the catchment area of the Sarasvati-Ghaggar, Chautang, etc.

The sites of the Rang Mahal Culture are also located in the riverbed itself, indicating that the river did not fill its entire bed during the period but flowing in a shrunk channel, which varied from time to time, the settlements being sited as near to the flow channel as possible[2]. Some of the Rang Mahal sites, however, are quite large-sized with mud fortifications and occupation-deposit ranging between 12 and 13 m, representing accumulation of several centuries. This would indicate an adequate water-supply, perhaps due to a partial resuscitation of the river-system during the first half of the first millennium AD

C. CLIMATE

Another issue which concerns us in the present context of the environments is the palaeo-climate of the region. On the basis of stratigraphy, radiocarbon dating and pollen analysis of three salt-lake deposits at Lunkaransar, Sambhar and Didwana in western Rajasthan, and one fresh water lake at Pushkar in the Aravali range, in eastern Rajasthan, located respectively in arid, semi-arid and semi-humid belts with differing mean annual precipitation, along with few soil samples from the pre-Harappan levels at Kalibangan, certain deductions have been made about the climatic history of Rajasthan[3]. The environmental sequence as deducted from the vegetation history and stratigraphy of the lake basin deposits have been grouped into five phases, I-V, of which Phases II-V are also broadly time-stratigraphic, belonging to the Holocene. The power boundaries of Phases I and V and the upper limit of Phase IV are not time-stratigraphic :

Phase I	before *circa* 8000 BC	
Phase II	*circa* 8000-7500 BC	
Phase III	*circa* 7500-3000 BC	
Phase IV	*circa* 3000-1000 BC	
sub-Phases	(A) 3000-1800 BC	
	(B) 1800-1500 BC	
	(C) 1500-1000 BC	
Phase V	early centuries AD to the present.	

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[1] A Ghosh, "The Rajputana Deserts, its Archaeological Aspect", *Bulletin of the Council of National Institute of Science of India* Vol. I (Calcutta, 1952), pp-37-42; M R Mughal "New Archaeological Evidence from Bhawalpur" *Indus Civilization : New Perspectives* (ed.), Ahmed Hasan Dani (Islamabad 1981), pp 33-42 and M R Mughal, "Recent Archaeological Research in the Cholistan Desert", *Harappan Civilization* (ed.), G L Posschl (New Delhi, 1982) pp 85-95

[2] Ryda Hanna, *Rang Mahal*, The Swedish Archaeological Expedition to India 1952-54 (Lund,1959)

[3] P Jagannathan and V K Raghavendra, "Wet Spells in Rajasthan", *Proceedings of the Symposium on the Problems of the Indian Arid Zone, Jodhpur* Vol. II (Delhi, 1964), pp 434; Gurdip Singh, "A Palynological Approach Towards the Resolution of Some Important Desert Problems in Rajasthan", *Indian Geohydrology*, Vol. III No 1(1967), pp 111-128 1971 The Indus Valley Culture, Gurdip Singh, R D Joshi and A B Singh, "Stratigraphic and Radiocarbon Evidence for the Age and Development of Three Salt Lake Deposits in Rajasthan India", *Quaternary Research* Vol. 2, No 4 (1972) pp 496-505; G Singh, R D Joshi, S K Chopra and A B Singh, "Late Quaternary History of Vegetation of Climate of the Rajasthan Desert India" *Philosophical Transactions of the Royal Society of London* Vol. 267, No. 889 (London, 1974), pp 467-501; D P Agrawal, *Reconstructing the Past Climate and Environment*, Sir Charles Albert Seward Memorial Lecture, Birbal Sahni Institute of Palaeobotany (Lucknow, 1975), and B M Pande, "Archaeological Remains on the Ancient Sarasvati", *[illegible] in Indian* (eds.) D P Agrawal and B M Pande (New Delhi 1977)

Phases I-III indicate respectively severe arid, wetter with more rainfall and slightly lesser humid (with lowering of rainfall) conditions. Phase IV, with which we are concerned in the present context, shows 'a sudden change to wetter conditions. The period of maximum wetness, however, appears to have lasted only up to about 1800 BC, followed by a straight reversal to a relatively weak wetter interval, lasting up to about 1000 BC'. The above three fold oscillations of climate are grouped as sub-phases IVA, IVB and IVC. It is argued that during sub-phase IVA 'the precipitation over Rajasthan in terms of annual average rainfall was probably 50 cm greater than at the present time in the arid belt. Phase V showed some amelioration in climate.

Supportive evidence for wetter conditions obtaining in phase IV is provided by the discovery of considerable reserves of ground water in the arid region of Rajasthan. Carbon-14 tests carried out the ground water at Palana near Bikaner indicate a date around 3000 BC. Whether these reserves of ground water resulted from higher precipitation in the region or is derived from the buried course of the Sarasvati is difficult to establish with any measure of certainty. Furthermore, the palynological evidence itself remains debated and needs further confirmation.

Tentative as these findings on palaeo-climate are, it is worth while correlating these with the archaeological evidence of the region and the hydrographic history of the river. Phase IVA (*circa* 3000-1800 BC) which shows wetter conditions, broadly covers the Early Harappan and Harappan periods, representing the maximum occupation of the region. During these periods both the Satluj and the Yamuna used to drain into the Sarasvati-Ghaggar-Hakra. Phase IVB (*circa* 1800-1500 BC), which indicates drier conditions, corresponds broadly to the Late Harappan period, representing differential densities of occupation in the region, depending upon the availability of assured water supply for sustaining the settlements. During this period, the Satluj was in its last stage of changing its course for occupying its present bed, and the Yamuna perhaps continued contributing some amount of water to the Ghaggar through its retreat channel. Phase IVC (*circa* 1500-1000 BC) which indicates a weak wet interval, partly covers the period of the survival of some of the Late Harappan Cultures including those of the Ochre Coloured Pottery. As pointed out earlier, the date for the upper limit of Phase IVC and the lower end of Phase V remains uncertain. Phase IVC is immediately followed by aridity, for which there is stratigraphic evidence of the drying up of the salt lakes and a marked change in vegetation. During this period, which was earlier designated by Singh as a separate phase, the region was occupied by the Painted Grey Ware using people. Both the Satluj and the Yamuna had this time

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C. Ramaswamy, 'Monsoon Over the [illegible] During the Harappan Period', [illegible] 217, No. 5129 (1968), pp. 628-2[illegible]

B.K. Thapar, 'Climate During the Period of the [illegible]', [illegible] D.P. [illegible] and B.M. Pande (New Delhi, 1977), pp. 67-73. [illegible] 'Investigation of the History of Rajasthan Desert' [illegible] (1975) [illegible] 'Palaeoecology of the Rajasthan Desert in the [illegible]' [illegible] 25 [illegible] 1976, pp. 54-58.

R.L. Singh, *India: A Regional Geography* (Varanasi, 1971); S.K. S[illegible] 'The Decca[illegible] of the Thar Desert [illegible] Environs During the Protohistoric and Historic Periods', [illegible] W.C. Brice (London, 1978), pp. 27[illegible]; S.M.A. [illegible] 'The Physiography [illegible]', *Geographical Review*, Vol. 4, No. 1 (1942).

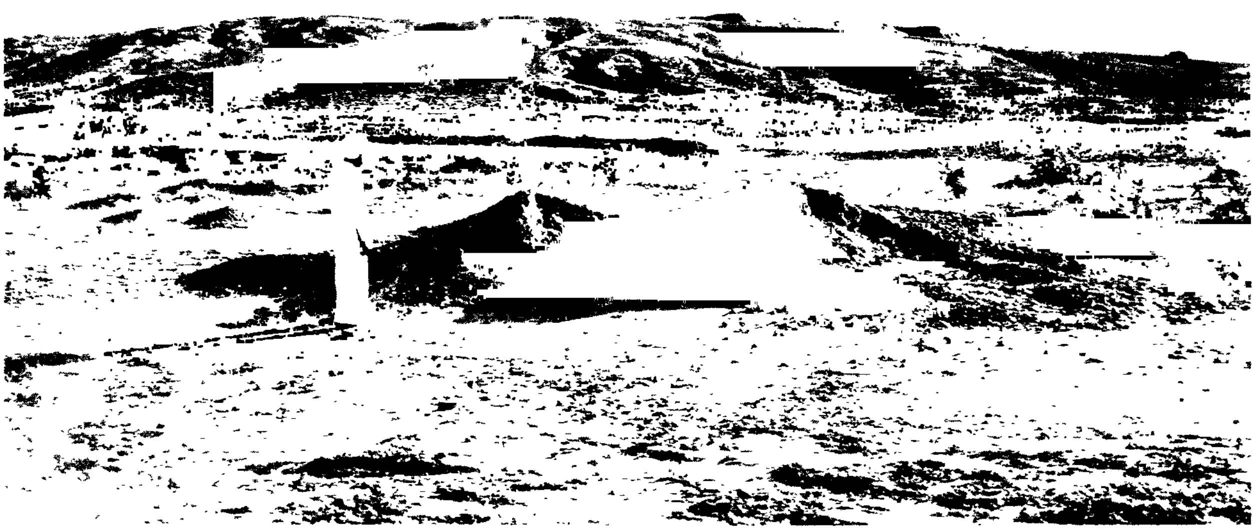
occupied their present respective beds. Phase V (early centuries AD to the present) which indicates some margina improvements after a protracted dry interval, includes, in its initial span, the period of the Rang Mahal Culture.



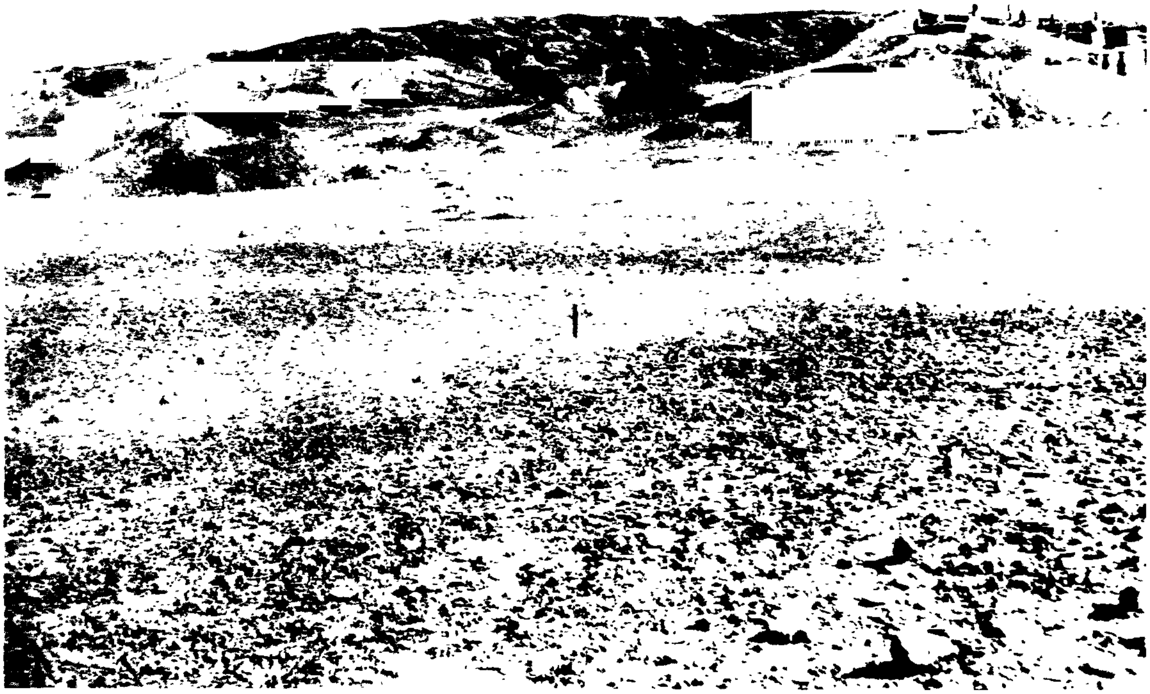
Pl. II *KLB-1 : general view from north-east. See p. 1*



Pl. III *KLB-1 general view from south-east* *See p. 1*



Pl. IV *KLB-1 general view from south-east* *See p. 1*



Pl. V *KLB-1: general view, excavations* *See p.1*



Pl. VI *KLB-1 general view, excavations from east* *See p.1*

DISCOVERY AND PREVIOUS WORK

2

B.K. Thapar

The earliest recorded notice of Kalibangan as an ancient site seems to be by James Tod[1], who while describing the annals of the erstwhile Bikaner State mentions it ('Kalibung') along with several other ancient towns like 'Rung-Mahal', 'Marote', 'Koriwalla', 'Phoolra', located on the northern border of that principality. He has, however, left us no other details about the historical or archaeological importance of Kalibangan. During 1916-19, L.P. Tessitori, an Italian scholar who was engaged in the bardic and historical survey of Rajputana, was entrusted with the task of compiling a list of the archaeological remains in that region. In the course of his exploration in the Bikaner State, he visited Kalibangan twice viz., April 1917 and December 1918 and left us an interesting account of his findings[2]. He informs us that in 1900, when the section of the Jodhpur-Bikaner Railway, connecting Suratgarh with Hanumangarh, was being constructed, Warren, an uncompromising engineer, dug relentlessly into the two mounds for obtaining ballast for the rail-track. The traces of Warren's trenches are evidence all over the several rectangular chambers, while on the smaller-mound, it is reported that 'hardly anything was left unexplored and that wherever bricks were found within easy reach, they were ruthlessly removed'. During this predatory digging considerable quantities of baked bricks and terracotta cakes of all shapes (triangular, double convex circular with thumb impression in the centre and nodules with finger impressions etc.) were excavated from the site and used as ballast for the above-mentioned rail-track, providing a parallel situation to that of Harappa, where from similar depredation was made in 1850s for the construction of the Lahore-Multan rail-track. During his two visits, Tessitori himself undertook some trial digging at the site, besides making surface collection of pottery, terracotta cakes, beads and bangles. Among the noteworthy structures exposed by him was a 106 cm square platform of bricks (size : 28 x 12.7 x 5 cm) and a burial urn, containing smaller vases, terracotta cakes and charred bones and ashes, on the eastern mound, and a 122 cm wide well, with its lining made of trapezoidal bricks at the smaller mound. Although he was not able to assign any age to the finds (the Indus Civilization remaining still undiscovered in 1918) it must be said to the credit of Tessitori that he was both perceptive and perspicuous to record the size of the bricks, the shape of the terracotta cakes (called by him variously as baked balls of irregular shape with finger marks, circular swollen discs with thumb impression, triangular discs or tiles blunted or rounded) at the occurrence of terracotta bangles (called by him as pieces of earthen rings of various sizes). Fragments of perforated jars (described by him as part of vase riddled with holes), terracotta bull figurines, steatite disc-shaped beads (described by him as flat beads of ivory looking like buttons with a single hole) in the centre (0.63 cm in diameter), shell bangles (called by him as pieces of ivory bangles) and fragments of indeterminate

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1 Lt Col Tod, *Annals and Antiquities of Rajasthan,* Vol II (London, 1832), reprinted 1957, p 167.

2 L P Tessitori, Unpublished , *A Report on Tours in Search of Archaeological Remains Made in the Bikaner State During the Years 1916-17, 1917-18 and 1918-19*

copper objects. It is widely known that each of these categories of finds is a distinctive trait of the Indus Civilization.

The site, however, sank into oblivion for almost a quarter of a century. Meanwhile, in 1921 at Harappa in Punjab, and in 1922 at Mohenjo-Daro in Sind, both now in Pakistan, an evolved urban culture, named the Indus Valley Civilization, was recognized. With this discovery, a new chapter was added to the prehistory of India and the record of civilization. It is unfortunate that Tessitori's finds from Kalibangan did not then attract the attention of Marshall and his Indian colleagues otherwise the areas of subsequent fieldwork would have been quite different, and also perhaps the name of the Civilization and its axis.

The two decades following these exciting discoveries at Harappa and Mohenjo-daro witnessed sustained archaeological field work in Sind, Baluchistan, and parts of Punjab and Gujarat. The area of its distribution was then known to be principally in the Sind plain, with significant cultural contact with sites in the secluded valleys of Baluchistan. Harappa and Chak Purbane Siyal on the Ravi, Kotla Nihang Khan on the Satluj in Punjab, Suktagendor on the Dasht Kaur on the Makran coast, close to the Iranian border, Dabarkot, south of Loralai in Baluchistan and Rangpur on the Bhadar in Kathiawad, Gujarat, were the only recorded sites outside the Sind region. In December 1947, the untiring Aurel Stein made a survey of the ancient sites along the 'lost' Sarasvati river in the territories of the erstwhile Bikaner and Bahawalpur States, extending from Hanumangarh to the deltaic portion west of Derawar[1]. His observations regarding the hydrographic features of the river, particularly its postulated junction with the Satluj, near Walar and Kudwala have already been referred to (above p. 6). During his explorations he had affirmed that between Hanumangarh and Fort Abbas there were no prehistoric mounds with pottery of Chalcolithic period by which he, no doubt, meant the period of the Indus Civilization. Among the many sites explored by Stein between Hanumangarh and Anupgarh was also Kalibangan about which he had remarked that the two mounds 'offer interest as marking an extensive site used mainly for burning bricks and pottery. They are composed almost entirely of kiln remains. The painted sherds found among them, leave no doubt the kiln having been worked down to the Kushana period, and the size of the area shows the demand for their produce. However, after referring to Tessitori's manuscript which was made available to him for finalising his report, he found that terracotta cakes of various shapes had been obtained by Tessitori in considerable number from the site. In his unpublished detailed report of survey, Stein had accordingly corrected himself to suggest that the occupation of the site and its use for king goes back to much earlier period than that of the painted pottery of the Rang Mahal type. He had however, failed to recognize that the painted pottery found on the site in fact belonged to the Indus Civilization and the two mounds represented occupational deposit thereof and not the accumulation of kiln-remains. Notwithstanding these findings, Stein had located quite a large number of Chalcolithic sites along the Hakra between Fort Abbas and Derawar which do not concern us in the present context of our study.

In August 1947, the subcontinent was divided into two independent republics of India and Pakistan, as a result of which all the known areas of the spread of the Indus Civilization fall within the political frontiers of Pakistan, leaving only the two outposts,

[1] Aurel Stein, "A survey of ancient sites along the 'lost' Sarasvati river", *The Geographical Journal* (London, 1942), Vol XCIX, [illegible] 173-82 and Aurel Stein [illegible] *archaeological tour along the Ghaggar-Hakra river (1940-42)*

Kotla Nihang Khan near Ropar on the Satluj and Rangpur on the Bhadar in Kathiawad, within the territory of India. Within about four years of the partition, A.Ghosh[1] carried out a systematic exploration of some of the dried-up river valleys in the northern part of Bikaner, including the part of the Sarasvati valley earlier surveyed by Aurel Stein. As a result of this exploration, Stein's conclusion regarding the absence of prehistoric mounds with chalcolithic pottery, east of Fort Abbas were proved untenable, for more than twenty-five mounds of the Harappa Culture were identified in the explored region, 'between Hanumangarh and Suratgarh in the Sarasvati valley'. Among these newly discovered Harappan sites, Kalibangan with its twin mound complex, recalling that at Mohenjo-daro and Harappa, appeared to be of potential importance. 'The site is by far the largest as yet found in Bikaner. It comprises, in fact, of two independent mounds parallel to each other, with a valley about 61 m, between the mound nearer the road is oblongish about 457.2 m x 245.4 m the area being north to south. The other one is about 45.2 sq. m with sullies and ramifications. Both are about 9 15 m high All the indications show them to be of the same age but they were distinguished as KLB-1 and KLB-2 some differential be found later on. All Harappan objects but only a few seemingly Sararingar objects were found at the top of KLB-I. An old man informed us that the mound had been excavated for six months, 51 years back for railway ballast. It is, therefore, churned at many places.'[2] It was, however, not until 1961 that planned excavation could be started at the site[3]. During this period, the limits of the Indus Civilization had been extended well within the Indian frontiers, up to Alamgirpur (on the Hindon - a tributary of the Yamuna) across the Indo-Gangetic divide in the east and to Bhagatrav on the estuary of the Tapti in the South.

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1. A Ghosh, "The Rajputana Deserts - its archaeological aspect", *Proceedings of the symposium on the Rajputana Desert Bulletin of the Council of National Institute of Science of India* (Calcutta, 1952), Vol I, pp 37-42

2. From unpublished notes of A Ghosh

3. B B Lal, "A new Indus Valley provincial capital discovered Excavation at Kalibangan in northern Rajasthan", *[illegible] London News* (1962) March 24, pp 454-57

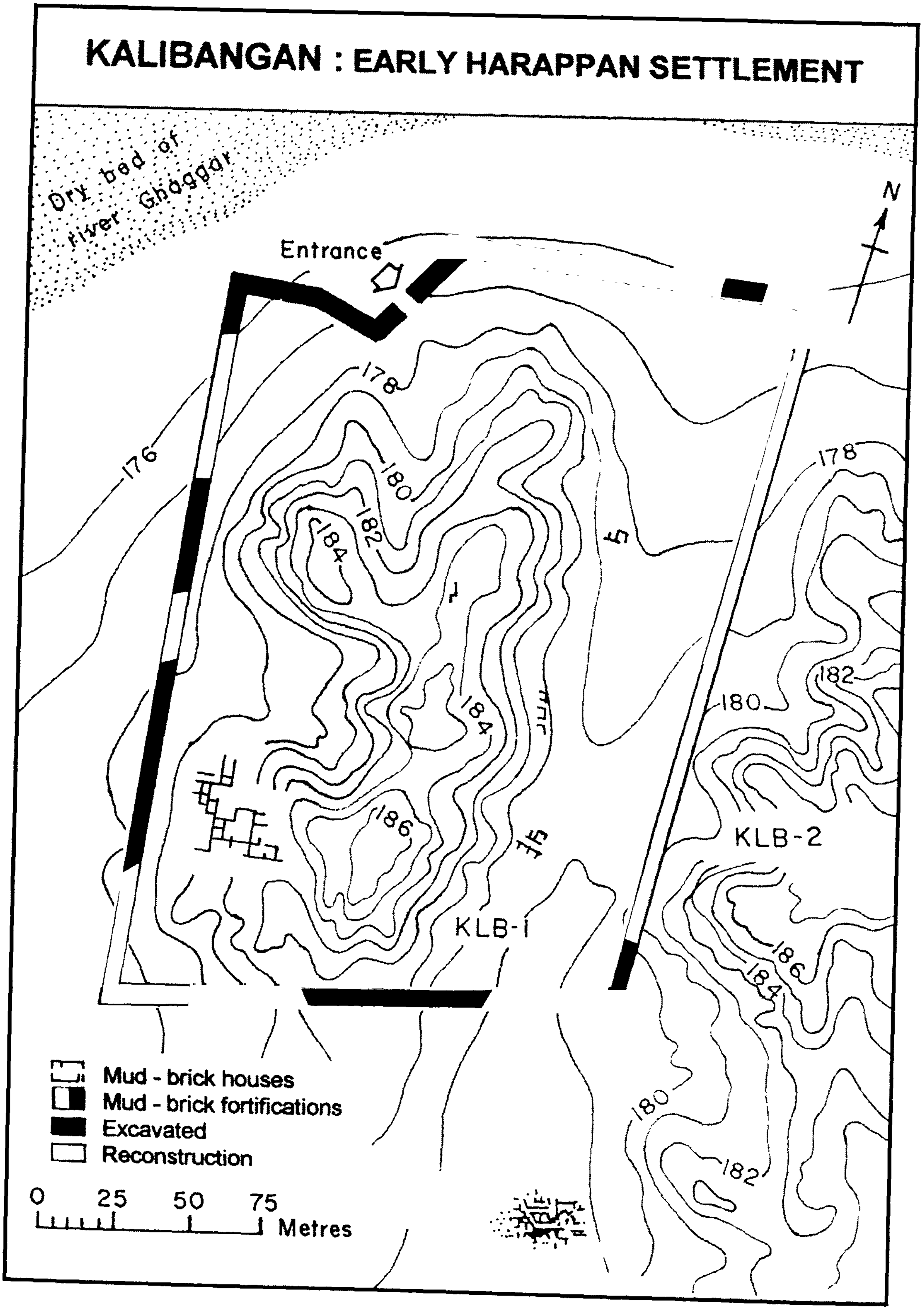

KALIBANGAN : EARLY HARAPPAN SETTLEMENT
Dry bed of river Ghaggar
Entrance
N
176
178
180
182
184
186
KLB-1
KLB-2
Mud - brick houses
Mud - brick fortifications
Excavated
Reconstruction
0 25 50 75 Metres

Fig. 1

SUMMARY OF RESULTS 3

Jagat Pati Joshi

DISCOVERY AND LOCATION

Kalibangan was first visited by L.F.Tessitori in 1916-19, later by Aurel Stein in 1947 and A. Ghosh in 1952 who have left important accounts of its archaeological potentialities. It is situated on the left bank of the Ghaggar (anciently known as the Sarasvati) in Tehsil Pilibangan, District Hanumangarh in Rajasthan, has three mounds, two big and one smaller mound to the east. The western mound is known as KLB-1, the middle one as KLB-2 and the third as KLB-3. In all, the excavations at Kalibangan were carried out for nine field seasons (1960-1969) by the Archaeological Survey of India. Out of these, during the five seasons viz. 1960-1961, 1961-1962, 1962-63, 1963-1964 and 1966-1967, excavations of only Early Harappan levels were carried out, besides those of the Harappan habitation. It may be recalled that the early Harappan pottery was first met in the stratigraphical context in the field season of 1960-61[1]. These excavations (fig. 1) have revealed that KLB-1 mound has an Early Harappan habitation exclusively in the lower levels. The end of the habitation seems to be due to a seismic upheaval, after which the area was occupied by the succeeding Harappans. In KLB-2, although the Early Harappan pottery continued for some time, the Mature Harappan elements had also started emerging in these strata. While the Early Harappan elements disappeared after some time, those ascribable to Mature Harappans continued upto the end of the site. KLB-3 has no Early Harappan occupation as such, but a few Early Harappan potsherds were found in the excavations along with Mature Harappan pottery. It has only a series of fire-altars of the Harappans.

ECOLOGICAL SCENARIO AND SUBSISTENCE REGIME

The Early Harappan habitation at Kalibangan is a part of the matrix of such sites of this period found along the Hakra-Ghaggar, the old bed of Sarasvati and palaeo-channels of the Satluj.

The environmental reconstruction is quite complex, however, on the basis of C-14 dates, the Palynological researches from salt lakes of Lunkaransar, Sambhar, Didwana in Rajasthan and a few soil samples (pl.I) from Early Harappan levels of Kalibangan indicate the time span called "Phase IV, Sub-period A, i.e., 3000 BC to 1800 BC" which was the period of maximum wetness and during this period Early Harappan and also Mature Harappan cultures flourished[2] at Kalibangan. The wetness may be attributed to the high rainfall and presence of the Sarasvati affording appropriate environment for a high level of floral and faunal diversity possibly having gallery forests. This might have resulted in

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1 *Indian Archaeology 1960-61 - A Review*, pp 31-32

2 B K Thapar, *op cit*, *p* 5

Robert L Raikes, "Death from Natural Causes", *Antiquity* (Cambridge, 1986), p 286-91, Gurudip Sing *et al.* "Stratigraphic and Radio-Carbon Evidence for the Age and Development Three Salt Lakes Deposits in Rajasthan", *Indian Quaternary Research* Vol 2, No 4, pp 496-505, 1972; Gurudip Singh, "A Palynological Approach Towards the Resolution of Some Important Desert Problems in Rajasthan", *Indian Geohydrology*, Vol I, III, No. 1, 111-128, 1971, Gregory G Possehl, *Indus Age* (New Delhi, 1999) pp 257-268 379

a moist vegetation comprising evergreen forest type and range lands. The clues indicate that the forests reached its 'climatic climax'. The vegetation of the Early Harappan period consists of *Acacia* (Babul), *Tectona grandis* (Teak), *Dalbergia* (Sisham) *Anogeissus sp.* (Dhak) which could be attested to by the charcoal samples leading to the presumption that besides using the timber of these trees for construction purposes, it was also used for tool handles of agricultural implements e.g. plough and furniture (cots) (examples in terracotta models of plough in Harappan levels and terracotta models of cots from Early Harappan and Harappan levels with a designed bedspread over it are available). The bark of *Acacia* could have been used as a colouring or dyeing agent. The abundant quantity of these trees led to their use as fire-wood also. It is interesting to note that out of four charcoal samples, Babul (4870 K cal per Kg), Dhak (4739 K cal per Kg), Shisham (5180 K cal per Kg), produce more heat, less smoke leading to better combustion. However, teak is not a good fire-wood and gives smoke. It appears that *pipal* and banana were grown as these are well represented in the painted pottery, besides sunflower, creepers, barley, wheat plants and cactus were also there. Strictly speaking, these were the flora available in the Early Harappan levels. However, the Mature Harappan period which is not far removed had vegetation which is given in the footnote below[2]. The copper celt and a *parasu* type axe were used for woodcutting and offence. The offensive aspect is amply demonstrated by the evidence (of course, in the Harappan context) of a murderous attempt on a knee joint found on a skeleton in the Harappan cemetery.

The wet climate[3] is also attested to by the faunal remains of *Rhinoceros unicornis* (rhinoceros), *Bubalus bubalis* (bison),

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[1] L S Khanna, *Principles and Practice of Silviculture* (Dehradun, 1989), pp 150-152

[2] *Indian Archaeology 1975-76 - A Review*, p 87. Charcoals from the following twenty-nine samples were identified -

Harappan Level :-

TF-440, *Calligonum* sp [KLB-2, D-7, Qd 3 (10), 2 17 m], TF-439, *Ficus* sp (cf *glomerata* or *religiosa*) KLB-2, C-7, Qd -3, (6), 1 65 m], TF-436, *Dalbergia sissoo* (KLB-2, E-2, Qd 4, (1), 1 42 m], TF-435, *Boswellia serrata* [KLB-2, L-2, Qd 4 (5), 1 40 m], TF-434, *Potamogeton* or *Nymphaea* [KLB-2, E-2, Qd 4, (4), 0 97 m], TF-433, *Tamarix dioica* [KLB-2, XC-9, Qd.2, oven hearth sealed by (6), 1 45 m], TF-432, *Morus indica* [KLB-2, XA-15, Qd 3 c 64-65, (7), 1 45 m], TF-431, *Salvadora persica* (KLB-2, XB-8, Qd 4, (4) 1 30 m), TF-430, *Terminalia* sp (KLB-2, C-5, Qd1, (6) 1 80 m), TF-429, *Dalbergia* sp : TF-427, *Albizzia lebbeck* [KLB-2, XA-2, Qd 2, (6S), 1.15 m], TF-425, *Acacia* sp, [KLB-2, XA-11, Qd 2, (6), 1 55 m], TF-423, *Anogeissus latifolia*, TF-421, *Acacia* sp (KLB-2, XA-10, Qd 3, (6), 1 45 m), TF-420, *Dalbergia sissoo* [KLB-2, A-6, Qd 4,c 64-65, 1(2), 2 5-3.0 m], TF-152B, *Tectona grandis*, 33615±85 (3720±90), TF-149, *Dalbergia* sp (2675±140 [DGA 6336, KLB-2, ZE-I c 62-63, - 15, Qd -1,4(3)]

R K Luna 1995, *Plantation Forestry* (Dehradun), pp 45-57, 148-152 and 289-305

[3] While reporting on four fragments of bones, *Rhinoceros unicornis* separately from Kalibangan, S Banerjee and S Chakraborty mention, "The occurrence of the remains of this species in Rajasthan, is therefore, quite interesting and supports the idea of its extensive distribution in the earlier days. Moreover, since *R unicornis* generally inhabits swampy land mixed with forest, its occurrence in Rajasthan strengthens the geological evidence that the desert conditions of this area is of recent origin" S Banerjee and S Chakraborty have also compared the Kalibangan rhinoceros in the following chart

	Kalibangan (mm)	Harappa (mm)	Lothal (mm)	Modern specimen from West Bengal (mm)
Distal diameter of humerus	126	X	X	115
Distal diameter of tibia	125	X	X	113
Length of third metatarsal	190	X	X	147
Length of scapula	X	470	X	460
Height of the mandible at the posterior end	X	X	266	267

S Banerjee and S Chakraborty, "Remains of the great one-horned Rhinoceros, Rhinoceros unicornis, Linnaeus from Rajasthan" *Science & Culture*, Vol 39 (Calcutta, October 1973), pp 430-431

Bhola Nath mentions "The recent excavations at Kalibangan (Nath, unpublished report) in District Sriganganagar, Rajasthan has revealed the existence of large number of animal remains of Harappan culture. Amongst domestic animals the *Bos indicus* Linn. of

(continued to next page)

Elephas maximus (elephant), *Chitra indica* Gray (River Turtle), *Canis familiaris* Linn (Domestic Dog), *Felis chaus* Goldust (Wild Cat), *Equus hemionus* Pallas (Ass), *Cervus duvauceli* Ccuvier (Deer), *Cervus unicolur* Kerr (Barasingha), *Axis axis* Erxyl (Spotted Deer), *Sus scrofa* Linn (Domestic Pig), *Bos indicus* Linn (Cattle), *Capra hircus algagus* Erxyl (Domestic Goat and Sheep), *Bosepahus tragocamelus* Pallas, (Neel Gai), Telestoi fish. A large number of cattle bones *(Bos indicus)* suggests the raising of live stock dependent on wide stretches of pasture lands. Fowls were also domesticated and fish eaten. scorpion, also represented in painted pottery. The animal remains of the Mature Harappan period are also enumerated in the footnote below to give a holistic picture.

In this ecological scenario, the subsistence pattern consisted of raising of livestock coupled with agriculture, evidenced by the furrowed field surface having two rows of furrow marks in two directions, cutting at right angles to each other, closely spaced furrows in one direction crossing widely spaced furrows which indicates 'mixed crop cultivation' and it has great similarity to such growing of double crops even in modern times, during the winter season in Rajasthan. The terracotta model of ploughshares of the Harappan period could give the idea of the ploughshare in the antecedent Early Harappan culture (p. ante).

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which two distinct types have been distinguished from Kalibangan : (i) a large massive form of long-horned cattle, (ii) a small form with short horn and others such as Indian domestic buffalo, the goat, the sheep, the pig, the dog, the Indian elephant, the fowl and the domestic ass (*Equus onager*)

Amongst wild animals rhinoceros (*Rhinoceros unicornis* L.) and shells of turtles, the Barasingha deer, Sambar and spotted deer's remains have been found.

The remains of these animals show that the climate at that time was more humid than the arid climate of present day. The large number of domestic animals recovered from the excavations show that the people were pastoral-cum-agricultural. The animal remains from Kalibangan are similar in number and kinds with those from Harappa & Mohenjodaro".

Bhola Nath, "The Role of Animal Remains in the Early Prehistoric Cultures of India", *Indian Museum Bulletin*, p. 107 (Calcutta 1969)

In his communication of 239-3/76 tech./19384 dated 12th August 1977' Shri S. Banerjee enclosing the identification report of animal remains from Kalibangan by S. Banerjee, R.N. Mukherjee and partly by B. Nath of Zoological Survey of India, informed the Additional Director General, Archaeological Survey of India, the presence of following species from Early Harappan and Harappan levels of Kalibangan. Out of these, the animals of Early Harappan levels are discussed above. The period-wise distribution has now been done by the author. The total species identified of Early Harappan and Mature Harappan periods are as below .

Lamellidens marginalis (Lamarck), *Parrevsia corrugata* (Muller), Teleostei fish, *Kachuga tectum* Gray, *Bataqura baska* (Gray), *Chitra indica* Gray, *Lessymes punctata* Gray, *Gallus* sp , *Columba livia*, *Canis familiaris* Linn., *Canis Lupus* Linn, *Felis chaus* Goldust, *Elephas maximus* Linn, *Rhinoceros unicornis* Linn, *Equus asinus* Linn, *Equus hemionus* Pallas, *Equus caballus* Linn, *Cervus duvauceli* Cuv, *Cervus unicolor* Kerr, *Axis axis* Erxl, *Muntiacus muntijak* Zimm, *Sus scrofa* Linn, *Bos indicus* Linn, *Bos qaurus* H. Smith, *Bubalus bubalis* (Linn), *Ovis orientalis vignei* Blyth, *Capra hircus* Linn, *Boselaphus tragocamelus* Pallas, *Camelus dromedarius* Linn, *Camelus* sp.

A K Sharma, "The Harappan Horse was buried under the dunes of.. " *Puratattva*, No. 23, (New Delhi, 1993), pp 30-35; G.L Badam and V.G. Sathe, "Subsistence Economy of the Indus Civilization", *Indian Archaeological Heritage* (eds.) C. Margbandhu, *et al* (Delhi, 1991), pp.135-144, has given a chart wherein the animals at Kalibangan of Mature Harappan period are enumerated as below :-

Wild animals :- *Rhinoceros Unicornis* (Indian one horned rhinoceros), *Cervus duvauceli* (Barasingha), *Axis Axis* (spotted dear), *Trionyx gangelicus* (fresh water turtle), *Chitra Indicus* (River turtle)

Domestic animals :- *Bos indicus* (domestic cattle), *Bubalus Bubalis* (domestic buffalo), *Ovis aries* (domestic sheep), *Capra luvacus aegagms* (domestic Goat), *Equus cabalusinn* (domestic horse), *Equus asinus* (domestic Ass), *Elephas maximus* (Indian Elephant), *Camelus dromedarius* (one humped camel), *Sus scrofa cristatus* (domestic pig), *Canis familiaris* (domestic dog), *Canis teaggerams* (Harappan dog), *Felis calms domestians* (domestic cat), *Gallus sp* (domestic fowl)

Large number of bones of *Bos indicus* found during the excavations suggest the use of bullocks for agricultural activities. The occasional flooding of the Sarasvati which brought rich alluvial soil added to the productivity and fertility of the soil. From Early Harappan levels at Kalibangan, both mono and dicotyledenous grains have been recovered of which the former wheat (*Triticum spharococcum*) and barley (*Hordeum vulgar*) used for staple diet whereas the latter, i.e, pea was used as a cereal. The use of barley, a more popular grain indicates their awareness of its high nutritious value in the dietary. They grew wheat and barley[1], *Pisum* (*matar*) and *Cicer artieum* (*chana*, black gram)[2]. Incidentally, apart from wheat flour being exclusively used for making *roti*, the mixture of flour of barley, wheat and gram was also possibly used as it is even to-day in wide use as '*sattu*', a fast food in many parts of northern India which is most nourishing and a balanced diet. Besides, these cereals were used individually also. "Since cultivation during that period seems to have depended on flood- irrigation, supplemented by seasonal precipitation, it is reasonable to infer that only the winter crop viz. the *rabi*, was grown, the sowing being done in the autumn after the river flood resulting from tropical monsoon had subsided."[3] The find of gypsum in a potsherd from Early Harappan levels (it is stratigraphically found in Early Harappan levels) is a pointer that the Early Harappans perhaps used gypsum as a fertilizer 'to reclaim saline lands and render them productive'[4]. It is perhaps during the Early Harappan times that the artificial system of irrigation was evolved which was further advanced during the Mature Harappan times[5]. Saddle querns, mullers and pestles were used for grinding and making paste and powder of these cereals. Interesting evidence regarding cooking practices was revealed by the presence of ovens, inside the houses, both of the underground and above-ground variety, closely resembling the present day tandoors in the region. The former has mud-plastered wall with a slight overhang near the mouth and the latter, also made of mud-walls with bridged side opening for feeding fuel, seem to have been periodically plastered. The innovation of this advance technology of baking wherein thick *roti* is baked in almost closed Tandoor (a barrel-shaped furnace with an open end) of which evidence has come to light from Early Harappan levels and suddenly disappeared in Mature Harappan levels and reappears in the early historical period. It is an enigma as to why this superior technology of baking *roti* was not continued and discarded during the Harappan times who used the terracotta *chaklas* for preparing

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[1] *Indian Archaeology 1972-73 - A Review*. The sample no. Ic. KLB-1/XA 17, Locus-A17, 8.47 x A18, 9.02 depth 2 50, stratum 17, has been found to contain several thousand charred grains of Hulled Barley, 50 grains of Naked Barley and one seed of *Pisum arvense* (chana)

In the material preserved at the Central Antiquity Section, Purana Qila, New Delhi, a seed of *Cicer arietinum* (Chenna) was identified. The impressions on the terracotta cakes are not of rice but of barley as stated by Vishnu Mittre. But during personal discussions with A.K. Sharma he has emphatically stated that the check-pattern of husk impression in terracotta cakes is that of rice *Oriza Sativa* Linn and not barley. This inference was obtained after examining a few more terracotta cakes very closely in the laboratory by him. Rice was very much available at Rangpur and Lothal (Personal communication from Shri A.K. Sharma)

[2] Vishnu Mittre and R. Savithri, "Food Economy of the Harappans", *Harappan Civilization* (ed.) G.L. Possehl (Delhi, 1988), p. 218

[3] B.K. Thapar, "New traits of the Indus Civilization at Kalibangan an appraisal", *South Asian Archaeology*, pp. 85 ff

[4] K.S. Saraswat, "Archaeological Remains in Ancient Cultural and Socio-Economical Dynamics of the Indian Subcontinent", *Four Decades of Indian Palaeobotony* (eds.), B.S. Venkatachala and H.P. Singh, Birbal Sahni Institute of Palaeobotony (Lucknow, 1992), p. 526

[5] Frankfort, Henri Paul, "Le Development Protohistorique du Bassien de la Ghaggar (nord onest de l'ind)". Jean Claud Gardin (ed.), *L'Asie centrale et ses Reports Avec les civilization orientales Des origin a l'Age due Fur* (Paris), MMAFAC, Diffusion Boccard, (1988), pp. 109-199, Frankfort, Henri Paul, "The Indo French Archaeological Project in Haryana and Rajasthan", *South Asian Archaeology*, Occasional Papers (London, 1989) pp. 260-64

phulka roti. The presence of roughened lower surface of the small globular bodied jars (*handi*-like with open mouth) are clear indicative of boiling of barely and wheat coarse particles for making porridge or *Dalia*. The husking troughs of fabric 'D', though heavy, were perhaps used for cleaning the grains of different cereals having husk. Besides, meat of fowl, pig and goat was also possibly part of dietary. Equally noteworthy was the existence of cylindrical pits lined with lime plaster, possibly, for storing grains[1].

FORTIFICATION

The Early Harappan settlement at KLB-1 was situated on the bend of the river, beyond the active flood plain of the river Sarasvati and was a parallelogram, some 250 m from north-to-south and 180 m from east-to-west with an entrance in the northwestern side (fig.1). Excavations have revealed that the fortification wall was made of mud bricks 30 x 20 x 10 cm; proportion 3:2:1 having two structural phases(pl.VIII). In the first phase, the basal width of the fortification was 1.9 m while in the later phase it measured 3 to 4 m, the extra thickness haering been added on the inner side. It appears that both the inner and outer faces of the wall were originally plastered with mud, patches of which were found preserved at many places during the excavations.

HOUSES

Within the walled area the houses were built of mud bricks of the same size as those used in the fortification wall, the masonry being in the English bonding technique, with alternate courses of headers and stretchers. The use of kiln fired bricks was attested to by a drain, the size of bricks being the same as that of sun baked bricks. In the limited area of the excavation (largely on the slope of the mound) it was not possible to expose complete house-plans. Nor was it feasible to dig at other places, for it would have involved removal of the superimposed Harappan deposits. Nevertheless, on the basis of extant exposed remains it may be stated that a house consisted of three to four rooms with a courtyard and few rooms to the northwest separately on one side having tandoors. This indicates that the Early Harappans were conscious of smoke pollution as they deliberately chose to locate the tandoors in the northwestern corner of courtyard of the house, as for major part of the year the wind direction in the region is from NE to SW. This is also further corroborated by the location of the cemetery of the succeeding Harappans. The alignment of the houses, no less than the size of the bricks used, was significantly different from those of the succeeding Harappans. Five phases of building activity have been noticed. The alignment of houses was slightly deviated from the succeeding Harappans who strictly followed cardinal directions.

LANES

The excavations also brought to light part of a 1.5 m wide lane running in the east-west direction. From the width of the walls (some of them only having a single course of bricks), it could be inferred that the houses were single-storeyed. A lane with a few houses/rooms on one side and a house with a threshold of one metre has been also found (pl.XVI).

POTTERY

The distinctive trait of this period, however, was the pottery, characterized by six fabrics, labelled A, B, C, D, E and F. Of these, fabrics E and F, distinguished essentially by surface colour (E for buff and F for grey), did not show marked individualities either in shape or in painted design, their main features being shared by other fabrics also. In pottery dish-on-stand type in form and fish scale, *pipal* leaf and

[1] Grateful assistance has been received on reconstruction of flora and fauna from Dr Manish Pande, Research Fellow at Arid Forest Research Institute, Jodhpur under ICFRE, Dehradun



Pl VII *KLB-1 terracotta cake with incised horned deity*

horned designs(pl. VII) are available besides some incised grafitti akin to Harappan ones.[1] Some sherds are akin to Hakra and a few greyish sherds and knobbed wares akin to Rehman Dheri I. Some sherds of Reserved slipped ware are also available. While Kot Diji, Gumla, Sarai Khola, Jalilpur, Harappa and Kalibangan have many comparable forms, designs and shared features, there are regional variations also, which set on one hand some commonness and a regional dynamism leading to an evolutionary trend. This has happened at Kot Diji, Rehman Dheri, Kunal, Banawali, Kalibangan. Sarasvati Valley in the Indian Union was an important region of Early Harappan emergence showing gradual development. (see p. 27 *f*).

ANTIQUITIES

A flake tool industry on chalcedony of backed and serrated blades of chert, beads of carnelian, steatite, faience, copper, gold and terracotta cakes, copper celts are other important finds. On the basis of metallurgical analysis conducted by Dr. B.B. Lal on the Early Harappan and Harappan copper objects from Kalibangan, it was found that the samples do not contain arsenic whereas the copper objects from Mohenjodaro and Harappa do contain arsenic. On the basis of metallurgical analysis carried out by Dr. B.B. Lal, (p. 266) on nineteen Early Harappan copper objects from Kalibangan excavations, it was found that the samples do not contain arsenic but out of eight samples from the same site analysed by Dr. D.P. Agarwal, he found arsenic in six samples. He also did not find arsenic in two samples. The stratigraphical levels are not available but Agrawal has reported aresenic in his papers.[2] Arsenic is reported in the copper objects from Mohenjodaro and Harappa, whereas Lothal has arsenic-free copper. Thus it is evident that Harappan copper objects are with arsenic and also without it indicating two sources of copper ore. In view of the of the availability of copper celt and 'V' shaped arrow-head of the Ganeshwar-Khetri type(*circa* 3000-2800 BC) from Kalibangan, one would like to agree with R.C. Agrawal's

[1] Asko Parpola has pointed out, "In the Early Harappan pottery decoration of Kalibangan (fig 23.45 f) one can see, over Mundigak IV (fig 23.45 e) and Balakot some relationship with the proto Elamite rendering of the sacred tree (fig 23.45 a-d)". At Kalibangan a seal has been found mountain topped by sacred tree motiff" (*Pipal* leaf) Asko Parpola, "Harappan and Near Eastern Glyptic art", *South Asian Archaeology* (Cambridge 1981), pp 190-194

[2] D.P. Agrawal "[illegible] in the Indian Bronze Age" *Madhu "Recent Archaeological Reserches in Indian Archaeology and Art History* (ed) M.S. Nagaraja Rao (Delhi 1981) pp 9-16. D.P. Agrawal, *Copper Bronze Age in India* (Delhi, 1971). D.P. Agrawal "*Ancient Metal Technology and Archaeology of South Asia*" (Delhi, 2000). R.C. Agrawala, "Aravalli, the source of copper for Indus Civilisations and Indus related cultures" in *Frontiers of Indian Civilisation*(eds) BB Lal and SP Gupta, (Delhi, 1984), pp 157-62

suggestion that Ganeshwar-Khetri region was the supplier of copper tools to the Early Harappan and Mature Harappan of Kalibangan which was only 250 Km away. Incidently, Khetri has the copper ore with arsenic. The arsenic-free copper objects might have been imported from elsewhere. Rangpur and Lothal have also arsenic free copper. As only finished goods of copper have been found from the Early Harappan levels it appears that they were importing finished copper objects and not manufacturing themselves. Similarly gold was also imported besides steatite for beads. So far as small blade tools are concerned, the excavation at Kalibangan has yielded them sizable quantity in small blade tools shaped out of agate, jasper and chalcedony from Early Harappan levels one these are totally absent from the Mature Harappan levels. The evidence perhaps indicates towards the roots of the Early Harappans in the Late Stone Age traditions as has been amply demonstrated at Mehrgarh[1] and other sites in Pakistan. It appears that the Early Harappans of Kalibangan also slowly evolved out of hunting-gathering communities. This flake industry is also very much in evidence in sites like Lakhmirwala, Gurni Kalan, Hasanpur-I & II, the site explored by the author in Distt. Mansa of Punjab, India. Early Harappans had contacts with the Neolithic people of Kashmir as evidenced by the find of a jar, containing carnelian beads, having a typical Early Harappan buckrenian design on it. It appears that as per the evidence existing today, in the absence of Neolithic ancestry, the possibility of Early Harappans slowly and independently evolving from hunting-gathering microlithic communities in to a settled community in the region is a greater possibility. Although two fragmentary mace-heads (weights for digging stick) shaped out of Himalayan schist have been found which appear to be extraneous element. The absence of Neolithic tool tradition in Kalibangan area could also be accounted for due to the absence of the raw material in the neighborhood.

CHRONOLOGY

The Early Harappan occupation at Kalibangan appears later than Kunal. Lal has placed it between *circa* 3000 BC to 2700 BC (see p. 27). Excavations at Banawali, Rakhigarhi and Dhalewan which have yielded an anticipatory horizon to Harappa Culture need a comparative study with Kalibangan material after the respective reports are available.

THE END

The Early Harappans at Kalibangan maintained their individuality in the lower levels of KLB-1 but they vanished from KLB-1 in the upper levels after a seismic catastrophe (see pp. 99-100) but continued in KLB-2 upto the middle levels along with the Harappans, thus showing an overlap at the site. By the time the site was reoccupied, the incomers had already developed certain traits which are characteristics of the mature Harappan phase, though they still continued with the Early Harappa traits, in particular the pottery. As time passed, the earlier pottery began to peter out and the Mature one became dominant. It is for this reason that middle level onward at KLB-2 we get only Harappan occupation in its mature form. It may be pertinent to note here that after the tectonic devastation which effected only the existing habitation of now designated KLB-1 was occupied by the newly arrived Harappans, which is evidenced by the presence of a thin wind blown deposition (indicating a temporary non occupation). The area KLB-1 had to be reoccupied after a gap of time as necessity for larger habitation was felt due to increase in local population. As the devastated area was required for reoccupation, it was the elite of the society who preferred to move to the area which had

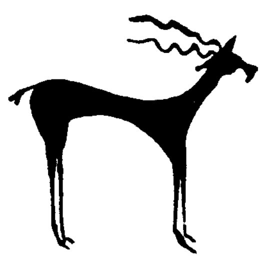
[illegible]

a higher commanding position now and environmentally more suitable. The elite preferred KLB-1 area as it was nearer to the river front.

EMERGENT PICTURE

The Early Harappans of Kalibangan did have the concept of fortified town planning. The building of houses on the either side of lanes/streets had started. Brick-built drains and brick-on-edge platforms (may be bathrooms) have been also found. The depiction of horned deity in painted pottery and terracotta cake (pl. VII), fish, fish scale, sacred *pipal* tree and trident in paintings; terracotta bulls are available in the Early Harappan levels of Kalibangan. It could be the beginning of the religious beliefs. They used terracotta cakes, a short blade industry, chert blades and with some knowledge of graffiti bearing similarity with the Harappan graffiti. They knew the use of dish-on-stand in pottery forms, besides, the use of copper, bronze, gold and steatite. The picture does suggest the existence of a formative stage of the Harappan Culture at Kalibangan in the Saraswati Valley which was in all probability an important centre of the Early Harappan Cultures.[1]

The excavation of the Early Harappan levels at Kalibangan, though not very extensive, does give sufficient evidence of a formative period or a sub-stratum as at different regions which led to the rise of Mature Harappan Civilization. Misra has rightly described "this phase can be equated with R.J. Braidwoods 'Sub era of expanded village farming community hovering on the threshold of urbanization'.[2]



[1] G.L. Possehl, *Indus Age* (New Delhi, 1999) p. 573.

[2] V.N. Misra, "Climate Changes and Indus Civilization", *Frontiers of Indus Civilization* (eds.) B.B. Lal and S.P. Gupta (New Delhi, 1984), p. 470

CHRONOLOGY OF THE EARLY HARAPPAN SETTLEMENT

4

B.B. Lal

To turn our attention to the chronological horizon of the Early Harappan settlement (Period I) at Kalibangan. This has to be done on the basis of the radiocarbon dates available to us in respect of eleven samples from this period. All the samples concerned were dealt with by the Tata Institute of Fundamental Research, Mumbai (Bombay), and published in various issues of the Radiocarbon. However, two of these samples, viz. TF-156 and TF-439, were re-run by the laboratory of the Birbal Sahni Institute of Palaeobotany, Lucknow and are labelled as TF-156 (BS) and TF-439(BS) respectively. All these are given below, indicating their stratigraphic position, viz. whether the sample concerned was collected from a late, middle or early level of Period I.

As is well known, radiocarbon dates have been "corrected" from time-to-time. Here we quote the latest, namely "Calib-3" correction, as given by Gregory L.Possehl in *Radiometric Dates for South Asian Archaeology,* a 1994-publication of the

Stratigraphic Level	Sample No.	Based on 5568-year half-life	Based on 5730-year half-life	Calib-3 correction (1 Sigma & 2 Sigma)
Late	TF-957	2355+/- 200 BP	2425+/- 205BP	1 Sig BC 782 (398)185 2 Sig BC 900 (398) AD 70
Late	TF-154	3665+/- 110 BP	3770+/- 115 BP	1 Sig BC 2192 (2029, 1994, 1987) 1886 2 Sig BC 2395 (2029, 1994, 1987) 1741
Late	TF-156 (BS)	4010+/- 165 BP	4130+/- 170 BP	1 Sig BC 2867 (2553, 2543, 2493) 2287 2 Sig BC 2917 (2553, 2543, 2493) 2034
Late	TF-156	3740+/- 105 BP	3850+/- 110 BP	1 Sig BC 2287 (2137) 1974 2 Sig BC 2462 (2137) 1789
Late	TF-165	3800+/- 100 BP	3915+/- 105 BP	1 Sig BC 2450 (2200) 2041 2 Sig BC 2489 (2200) 1934
Middle	TF-161	3930+/- 100 BP	4050+/- 105BP	1 Sig BC 2563 (2457) 2280 2 Sig BC 2853 (2457) 2059
Early	TF-240	3610+/- 110 BP	3720+/- 115 BP	1 Sig BC 2132 (1944) 1776 2 Sig BC 2281 (1944) 1680
Early	TF-162	3940+/- 100 BP	4060+/- 105 BP	1 Sig BC 2568 (2459) 2284 2 Sig BC 2857 (2459) 2137
Early	TF-241	4090+/- 90 BP	4215+/- 95 BP	1 Sig BC 2869 (2611) 2486 2 Sig BC 2888 (2611) 2404
Early	TF-157	4120+/- 110 BP	4245+/- 120 BP	1 Sig BC 2880 (2850, 2825, 2655, 2645, 2622) 2493 2 Sig BC 2918 (2850, 2825, 2655, 2645, 2622) 2362
Early	TF-155	4195 +/- 115 BP	4320+/- 120 BP	1 Sig BC 2911 (2872, 2792, 2777, 2713, 2708) 2586 2 Sig BC 3072 (2872, 2799, 2777, 2713, 2708) 2465
Early	TF-439 (BS)	6507+/- 125 BP	6700+/- 130 BP	1 Sig BC 5566 (5436) 5289 2 Sig BC 5600 (5436) 5224
Early	TF-439 Same as in the case of TF-439 (BS)			

University of Pennsylvania, Philadephia, USA.

We may now analyse the foregoing data. Judging against the other dates from Kalibangan itself and against the backdrop of the dating of other Early Harappan sites in India as well as Pakistan, the dates provided by Sample TF-439, viz. 5566-5289 (1 Sigma) or 5600-5224 (2 Sigma), are decidedly too early to be accepted. Sample TF-155 provides the lower limits as 3072 or 2911 BC. It may be rounded off to *circa* 3000 BC. Falling within the first quarter of the third millennium BC, the dates given by Samples TF-157 and TF-241 seem to be in order. While the date of Sample TF-162 may be accepted that for TF-240 seems to be out of tune when considered against the date provided by Sample TF-161 for the middle levels. As regards the dates for the late levels, that for Sample TF-957 may straight away be written off. Again, while the date for TF-156 (BS) may be in order, the other dates have got to be discounted in view of the radiocarbon dates available for the Mature Harappan settlement which came up at the site after a gap of about a century or so. The Mature Harappan dates for Kalibangan have been exhaustively dealt with by the author in his book, *The Earliest Civilization of South Asia*, pp.245-46 (Delhi: Aryan Books International, 1997). The concluding part therein reads: 'In summary, therefore, the Mature Harappan Civilization at Kalibangan may be dated from *circa* 2550 BC to *circa* 2000 BC, with a margin of about 50 years on the earlier side and of about 100 years on the later'.

In an overall assessment, therefore, the Early Harappan settlement at Kalibangan may be placed broadly between 3000 and 2700 BC.

5 THE EARLY HARAPPAN CULTURE-COMPLEX OF KALIBANGAN IN ITS WIDER SETTING

B.B. Lal

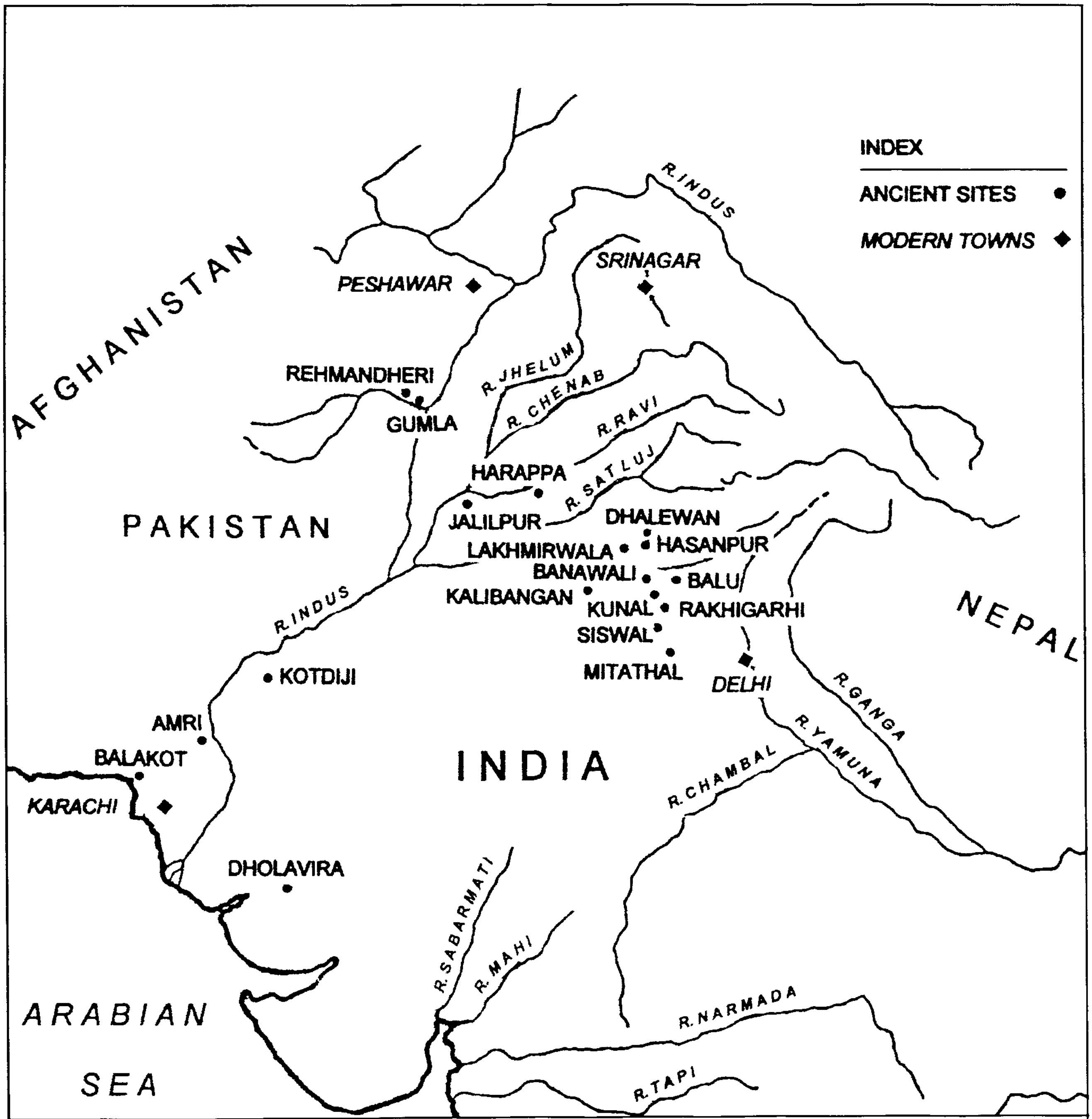
Let us try to ascertain how the cultural complex encountered in Peirod I at Kalibangan compares with that found at other Early Harappan/pre-Mature Harappan sites (fig. 2). In doing so, however, we will confine our enquiry to the Sarasvati-Ghaggar-Hakra (anciently known as the Sarasvati) valley, and only casually refer to sites in the main Indus system.

In India, besides Kalibangan, two other noteworthy sites of pre-Mature Harappan vintage have been excavated in the Ghaggar-Sarasvati valley. These are: Banawali and Kunal. After this chapter was written, Rakhigarhi has been excavated which too has yielded important Early Harappan remains. It is too late to include them. In the adjoining region of Pakistan, where the same river is known as the Hakra, no excavation has been carried out, but large-scale exploration have brought to light a culture-complex which seems to antedate even Kalibangan Period I. While making this comparative study, we will not go into a detailed analysis of any particular industry, be it the pottery or stone tools, but would take into account the totality of the culture-complex met with at the given site.

Even at the cost of repetition, we may first recount the main features of Period I settlement at Kalibangan itself. These are: well-planned houses and streets, oriented roughly along the cardinal directions; use of mud-bricks in house-construction, though kiln-fired bricks also attested to in the case of drains; the making of bricks in a set ratio which, however, was 3:2:1 and not 4:2:1 as in the case of the Mature Harappan stage; a system of fortifying the settlement, the fortification walls also following roughly the cardinal directions; limited use of microliths and bone tools; relatively more use of copper for a variety of objects; pottery predominantly wheel-turned, though handmade examples not wanting; six varieties of fabric identifiable; painted designs, some of which show the use of a second colour, viz. white, in addition to the usual black; red ware with multiple incised parallel lines on the exterior; application of clay intermixed with sand on the exterior of some of the pots; occurrence of graffiti on pottery, some of the symbols resembling those used in the Mature Harappan script; cooking in hearths as well as in tandoors; provision of lime-plastered circular pits, most probably for storage of grains; and last but not least, the laying out of agricultural field with typical criss-cross furrows. On the basis of radiocarbon dates, Period I may be placed between the 3000 and 2700 BC (cf. the chapter on Chronology). There was a break of occupation between Periods I and II, the latter being Mature Harappan and commencing around 2600 BC.

We may now pass on to Banawali which is situated on the bank of the Sarasvati (now dried up), some 120 km north-east of Kalibangan. Over here three periods have been identified, labelled as I, II and III from bottom upwards. Of these, I is Early Harappan, II Mature Harappan and III Late Harappan. While there was no break of occupation between I and II, there did occur a gap between II and III.

With a total deposit of about 3 m, Period I has been subdivided into three subperiods called A,B and C, from bottom upwards. Right from the beginning, the houses were



EARLY HARAPPAN SITES

0 200 400 600 KILOMETRES

Fig 2

oriented along the cardinal directions. These were made of mud bricks, though use of kiln-fired bricks is also attested to. As at Kalibangan, the bricks had a length: breadth:thickness ratio of 3:2:1. Inside the houses were located plastered circular pits, evidently for storage of grains. The pottery followed the six-fold fabric encountered at Kalibangan, as also the colour-scheme in the painted designs. That the Banawali I people used copper is duly established by the occurrence of an arrowhead and a fish-hook of that metal.

In the case of Banawali, two facts call for special attention. As per the evidence available, the settlement was not fortified right from the beginning. It was a bit later, namely in Subperiod IB, that the fortifications were erected. And what is more notworthy is that in Subperiod IC the concept of a Citadel and a Lower Town, so typical of the Mature Harappan stage, also came into being. In this context, the excavator, R.S. Bisht, observes that Subperiod IC was marked by 'drastic and diagnostic changes in architecture, planning and antiquities in an otherwise continuing cultural *milieu* of the preceding subperiods. The entire settlement was planned and constructed *de novo*. The dichotomous layout which the Harappans adopted was introduced during this subperiod. The fortification of the previous (Sub)period was externally chiselled or partially sliced away and doubled in width for housing the citadel, and the lower town was laid out contiguously towards the east as well as the north, while the position in the west remained unresolved.'[1] It may further be recalled that there was a continuity of occupation from Period I to Period II.

From the foregoing it would be seen that Banawali bridges the gap that was in evidence between Periods I and II at Kalibangan. Although no fortification wall ascribable to Subperiod IA was noted, it does not necessarily mean that the settlement at Banawali began earlier than that at Kalibangan. In any case, we do not have any radiocarbon dates for Period I of Banawali to press the argument either way.

We may now take up Kunal, located about 20 km north-east of Banawali as the crow flies. Over here no Mature Harappan remains have been encountered above the Early Harappan settlement. Hence the latter can be studied without any chance of a mix-up. Within the Early Harappan period itself three subperiods, named IA, IB and IC from bottom upwards, have been identified.[2]

The earliest Kunalians (of Subperiod IA) dwelt in pit-huts, as indicated by the occurrence of circular pits, about 1 m in depth and 2 m in diameter. Along the periphery of these pits post-holes have been identified, indicating that the pits were provided with some kind of wattle-and-daub superstructure. Living in subterranean shallow pits with an overhead wattle-and-daub structure may have been a deliberate act on the part of the inhabitants, since it would have provided adequate protection from the northerly Himalayan winds. By Subperiod IB the size of the pits increased, up to 3 m in diameter. Also, these were lined with mud bricks. The presence of mud-brick hearths in them indicates that cooking was done inside. In Subperiod IC the use of pit-huts was given up. Instead, square or rectangular houses were constructed. These were made of mud-bricks, the size of which was in typical Mature Harappan ratio, viz. 4:2:1. Within the houses, circular silos plastered with a combination of lime and clay have been recorded, which are similar to those noted at Kalibangan.

1 *Indian Archaeology 1986-87 - A Review* p. 33

2 J. S. Khatri and M. Acharya, "Kunal: A New Indus-Saraswati Site", *Puratattva*, no. 25 (New Delhi, 1995), pp. 84-86

Kunal has yielded all the varieties of pottery found at Kalibangan. Some of the painted designs in black outline and white in-filling are of special interest, for example, *pipal* leaves and peacocks, since these were to be the hallmark of the subsequent Mature Harappan times. Likewise, some of the pot-forms also point the same way. Particular attention may also be drawn to the occurrence in the lower levels (in IA and to some extent in IB) of a ware designated as the Hakra Ware by Mughal on account of his having discovered it exclusively at many sites along the now-dry bed of the Hakra (by which name the Ghaagar-Sarasvati goes on the Pakistan side of the border). We shall deal with the characteristics of this Hakra Ware in some detail when we come to the pre-Mature Harappan Cultures in Pakistan.

Although living in pit-huts, the Kunalians had duly stepped into the Copper/Bronze Age right from the beginning. This is attested to by the discovery of a variety of objects from the site. While Subperiod IA yielded arrowheads and fish-hooks of that metal, from subsequent subperiods came also spearheads and axes, besides ornaments like coiled cones and finger-rings (these latter recalling their Mature Harappan counterparts). That the metallic objects were manufactured locally is indicated by the discovery of a terracotta crucible with molten metal still sticking to it.

There is little doubt that the Kunalians, at least some of them, were very prosperous. In one of the houses, a jar of red ware was found to hold silver ornaments wrapped in a sliver sheet. These included 'two tiaras, one small and one large, each with a large fully opened flower having petals, topped with a decoration like the 'Greek letter alpha'[1]. Along with these tiaras there lay a multi-spiralled armlet, also of silver. The shape is interesting since it reminds one of the spiralled bangles worn by the famous Mohenjo-daro 'dancing girl'. In another house were found a large number of silver beads, discular in shape with perforation along the diameter, which are similar to those in gold found in the Mature Harappan levels at Lothal. From different parts of the site also came beads variously of chalcedony, carnelian, lapis lazuli and faience. In this context it needs to be pointed out that neither silver nor lapis lazuli is available anywhere nearby. For example, one has to go all the way west of the Indus to get lapis lazuli. This implies trade, either direct or through some intermediary. That the Kunalians were engaged in trade also seems to be indicated by the discovery at the site of seals, variously of steatite and shell, which evidently were used for sealing packages, containing some commodities. These seals are square in shape, bear geometric designs on the obverse and have a perforated knob on the reverse—features which are similar to those of their Mature Harappan counterparts, though admittedly the inscriptions and distinctive motifs are missing. In this context, however, it may be added that the pottery from Kunal, as that from Kalibangan and Banawali, does carry graffiti some of which are similar to the signs of the Mature Harappan script.

Now about the chronological horizon of the Kunal settlement. Three radiocarbon dates place it broadly between *circa* 3016 and 2577 BC.[2]

A comparative analysis of the settlement-patterns as well as the material contents of the three sites, viz. Kalibangan, Banawali and Kunal, discussed above, would indicate that the beginning of Kunal was earlier than that of either of the other two sites. This is also upheld by the radiocarbon dates. Further, Kunal never saw the Mature Harappan days, whereas the other two sites did. Between Kalibangan and Banawali, the

1 J S Khatri and M Acharya, 'Kunal – A New Indus - Sarasvati Site", *Puratattva*, no 25(New Delhi, 1995), pp. 84-86

2 B B Lal, '*The Earliest Civilization of South Asia*' (New Delhi, 1997), p 84

Early Harappan settlement at the former came to an end earlier, whereas Banawali continued its journey well into the Mature Harappan times.

Crossing the border along the Ghaggar into Pakistan, one comes to the region known as Cholistan. Here, as already stated, the river (now dry) goes by the name of the Hakra. In this area Mughal[1] has discovered three hundred and seventy seven sites, of which ninety nine are ascribable to what has been called the Hakra Ware Period (after the name of the river), forty to the Early Harappan times, one hundred and seventy four to the Mature Harappan stage, fifty to the Late Harappan times and fourteen to the Painted Grey Ware Period. In this context, it may be added that, no excavation has been carried out at any of these sites. At the same time, the exploration does give us a reasonable insight into the cultural contents of these sites.

Though going by a single name, the 'Hakra Ware' infact comprises quite a few varieties. A very distinctive category, designated 'Hakra Applique', consists of pots whose exterior surface is coated with clay intermixed with tiny bits of pottery. While the larger pots in this category are usually handmade, the medium-sized ones are wheel-turned. Some of the latter also have a painted band along the rim. In another category, called 'Hakra Incised', there are pots whose exterior is characterized by groups of incised lines, drawn either horizontally or obliquely or in a wavy fashion. The pots are usually wheel-made and well fired. There also occur a few examples which bear deeply incised designs on the interior. Painted pots also constitute a part of the Hakra Period, though their percentage is lesser than what it is in the later, i.e. 'Early Harappan', Period. Made of fine fabric and wheel-turned, some of the pots have a red or cream slip and are usually painted on the exterior with simple designs in black pigment. In a few cases an additional colour, viz. white, has also been used. Then there are some examples of even a buff-slipped ware with designs painted in black. Mention must also be made of what Mughal terms as 'Hakra Black Burnished' ware in which the red body is covered with a glossy black slip or just black colour. An interesting shape in this ware is that of handi-like vessels having sharp carination at the middle of the body.

Amongst the other cultural equipment of the Hakra Ware sites mention may be made of terracotta animal figurines of humped or humpless bulls with short joint legs. An exception is that of a cow, as indicated by the four udders. The other objects in this material comprise balls, beads, flesh-rubbers and bangles. In the lithic component prominent are microliths comprising leaf-shaped arrowheads, scrapers, borers and parallel-side blades with or without retouch. Other stone tools include pestles and mace-heads. Metal (copper), though present, is rare, represented by only a few bits. It would thus appear that the Hakra Ware people had not yet reached full-fledged Copper/Bronze Age. In this context, it may not be out of place to add that more than half of the Hakra Ware sites have a very shallow deposit and in all likelihood represent shifting camps.

Since, as already stated, no excavations have been carried out in Cholistan, one cannot demonstrate the interrelationship between the Hakra Ware sites and the Early Harappan ones in the region itself. But not very far, in the Ravi valley, is the site of Jalilpur where excavation has demonstrated their stratigraphic sequence. Over here two periods of occupation, numbered I and II from bottom upwards, have been identified.[2] Within the limited dig in Period I, no

1 M R Mughal, *Ancient Cholistan* (Rawalpindi, 1997).

2 M R. Mughal, "New Evidence of the Early Harappan Culture from Jalilpur", Pakistan, *Archaeology 27* (2), (1974), pp 106-13.

structures were met with, but clay-and-lime floors were duly noted. However, Period II was marked by regular houses made of mud or mud-bricks. Again, while Period I yielded only bone points, chert blades and a few beads including one of gold, from Period II came a variety of terracotta objects including toy-carts and 'cakes', saddle querns and mullers of stone, beads of carnelian and lapis lazuli and bangles of faience.

The most noteworthy ceramic of Period I was an underfired, handmade thick ware which had on the exterior a coating of clay, intermixed with small bits of pottery. It is this ware that characterizes the Hakra sites in Cholistan. In the upper levels of this period, however, there began to appear a well-fired, wheel-made red ware, painted with designs in black, brown or chocolate colour. By Period II, this latter ware began to dominate while the handmade coated ware gradually petered out. The Period II pottery included many of the shapes and painted designs (including those in black outline and white in-filling) which characterize what has now been accepted as the Early Harappan culture-complex, already referred to from so many sites in the Sarasvati-Ghaggar-Hakra system.

From the foregoing it would appear that the Hakra Ware-complex immediately preceded the Early Harappan Culture. However, excavation at selected sites in Cholistan itself is necessary to establish the point fully. In this context, it may also be mentioned that the recent excavation in the northern part of Mound AB at Harappa itself has brought to light a culture-complex which is distinguished by its handmade plain as well as painted pottery with some characteristic shapes, in levels that preceded the Early Harappan-complex (information from J.M.Kenoyer). One has thus to make a comparative study of this recently discovered pre-Early Harappan-complex at Harappa with that from the Hakra Ware sites in Cholistan in order to determine their interrelationship. A major question that has to be answered is whether or not this 'pre-Early Harappan-complex' is ancestral to the Early Harappan itself.

Finally, as mentioned earlier, some of the sites in the upper Ghaggar-Sarasvati valley have yielded some of the varieties going under the general banner of the 'Hakra Ware', intermixed with the Early Harappan culture-complex. It is, therefore, necessary to explore more thoroughly the area from the west of Kalibangan to well north-east of Kunal to find out if in this region too there exist settlements with a culture-complex similar to that of the Hakra Ware-complex and/or pre-Early Harappan-complex of Harappa.

STRATIGRAPHY

6

Jagat Pati Joshi

The stratigraphy of the following select trenches broadly tell the story of the Early Harappan structures in KLB-1 mound in an average deposit of 1.65 m. These trenches are on the eastern, western and southern slopes and adjacent flat area of the mound. Except the burnt-brick drain, all structures are made of sun dried bricks of 30 x 20 x 10 cm size.

TRENCH YF2 QD4, SECTION LOOKING NORTH (FIG. 3)

The trench YF2, on the toe of the mound, was taken up for excavation for locating the structures of Period I. Though it is situated on the tallus of the mound, it has yielded excellent results. The trench was well divided into four quadrants and all the four quadrants were excavated. Natural soil was reached only in Qd4.

Layer No. (1) has an average thickness of 10 to 25 cm. It contains humus and loose earth. Layer (2) is below layer (1), composed of brownish sticky clay having bands of ash. It has an average thickness of 25 cm. Layer (3) is below layer (2). It is ashy in colour and has an average thickness of 20 cm. Layer (3A) is below (3) and is composed of loose ashy material. There is a pit which is sealed by layer (1) and cut into (2) and (3). It is composed of loose earth and potsherds. It has an average thickness of 15-30 cm. Layer (4) occurs below this layer. It has bands of ash and sand and it is 15-30 cm thick. STR 47A is a wall built on (4) and sealed by (3A). It has a length of 4.25 m, width of 0.74 m and thickness of 0.30 m having 3 courses and it is clay plastered. The wall belongs to phase IV. Orientation of the wall is north-south. Layer (5) occur below layer (4). It is made of sticky earth and patches of loose earth. It has a thickness of 20 cm. STR 47B is a wall, built on layer (5) and sealed by layer (4). It has 2 courses of bricks, which belongs to phase III. It has also clay plaster. The orientation is north-south. Layer (6) occurs below layer (5) and is made of loose earth. It has a thickness of 20 cm. Layer (6) is a contemporary layer of STR 48. It is a wall built on layer (7) and sealed by layer (5) having two courses. It belongs to phase II. It has clay plaster. The orientation is north-south. Layer (7) occurs below layer (6). It is made of sticky clay. It has a thickness of 10 cm. Layer (7A) and (7B) occurs below layer (7). It has an average thickness of 10 cm. It is made of clay and earth. Layer (8) occurs below layer (7). It has clayey patches and has thickness of 10-15 cm. At a depth of 2.15 m ,Pit no. 3 has been found, cut into Natural soil and sealed by layer (8). STR 49 is a wall built on layer (7A) and sealed by layer (6). It is having 2 courses and clay plaster. The orientation of the wall is east-west. Bricks are not exposed fully. It belongs to phase II. STR 80 is built over Natural. It is a wall/platform running north-south having one course of bricks. It is 70 cm in length. STR 50A is a wall built on Natural. It is oriented north to south having four courses. It belongs to phase I.

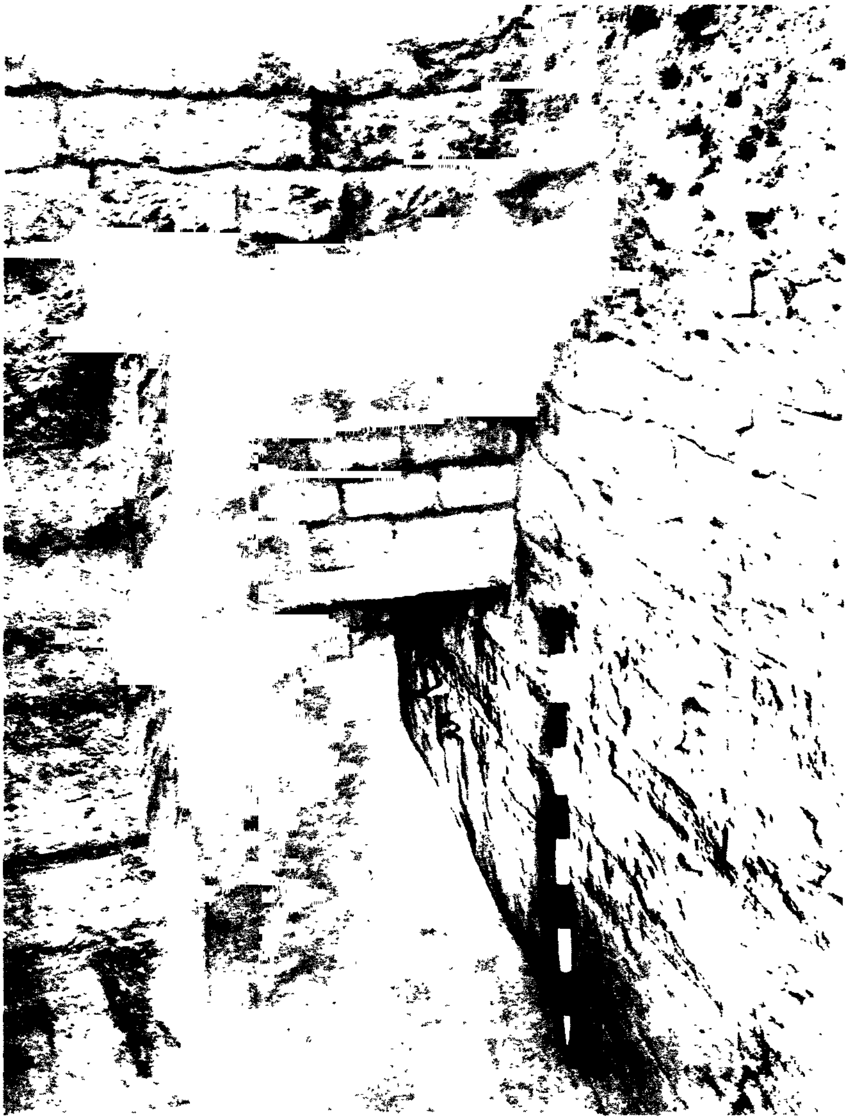
TRENCH YF2, QD 3, SECTION LOOKING SOUTH (FIG. 4)

Digging in Qd 3 has revealed the following stratigraphy : Layer (1) which is 10-25 cm in thickness has loose humus and earth. Layer (1A) which occurs below layer (1) is composed of brownish sticky clay with bands of ash. It has an average thickness of 25 cm. STR 34A and 34B is a wall built on layer (6). Its contemporary layers are (2) to

Concordance of layers of Early Harappan Levels

Average Deposit 1.65 m

D1	E1	XA5	XC1	XC1	XD1	XE1	XF1	XF1	XF1	XF1	YA17	YE1	YF1	YF1	YF2	YF2	YF2	XG1	YG2	YH	ZB1	ZB1	ZB2	ZB9	ZC2	ZC1	ZG9
Qd2			Qd1	Qd2		Qd3-4	Qd1	Qd2	Qd3	Qd4	Qd1	Qd	Qd1	Qd2	Qd2	Qd3	Qd4	Qdt1	YG2	Qd1	Qdt2	Qd3	Qd2	Qdt2	Qd2	Qd3	ZH9
														1	1						1	1	1				
1		13A	1			1					1			2	2		1				2	2	2				
2		14	2			2			1		2			3	3		2				3	3	3			1A	
3		14A	3			3			2		3	1		4	4		3				4	4	4			2A	
4		14B	4	18		4R			2A		4	2		5	5		3A				5	5	5		1	3A	
5		14c	5	19	1	5R		1	3	1	4A	3				1	4				6	6	5A		2	5A	
6	1			20	2	6R	1	2	3A	2	5	4				2	5					6A	6		3	6A	
	2			21	3	6RA	2	3	4	2A	5A	5				3	6					7A			4	7A	
	3			22	4	6RB	3	4	5	3	6	6	1			3A	7		1			7			5	8	
	4			23	5	6RC	4	5	6	4	7	7	2			3B	7A	1	2	1		8		1	6	8A	
	5			24	6	6RD	5	6	7	5	8	8	3			4	7B	2	3	2		9		2	7	9	1
																	8	3	4	3		10		3	8	9A	1A
	Natural				Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural				Natural	Natural	Natural	Natural			Natural			Natural	Natural	Natural



Pl VIII *KLB-1: Early Harappan defence wall of two phases and Harappan revetment See pp 21&52*

(5) and sealed by layer (1A). It has ten courses. It belongs to phases III & IV. Layer (3) occurs below layer (2). It is ashy in colour and has an average thickness of 20 cm. STR 36 and 37 are over-ground tandoors built on the top of layer (3) which is its working level also. Layer (2) is its contemporary deposit. These ovens or tandoors are projected in the section and belong to phase IV. Layer (4) which occurs under layer (3) has specks of sand and is 0.30 m thick. It is slightly loose with compact patches. Layer (5) occurs below layer (4). It is made of sticky earth and loose ashy patches. Layer (6) occurs below layer (5). It is composed of loose earth with compact patches in this area. It has a thickness of 30 cm. Layer (7) is below layer (6). It is 15 to 30 cm thick. It is made of compact clay. STR 42 is built on top of layer (6). Its contemporary deposit is layer (6). It is a wall having nine courses. It belongs to phase III & IV. STR 41 is built on layer (7) and its contemporary deposit is layer (6) and it is sealed by layer (5). It has three courses. STR 35 is a wall of three courses built on top of layer (8) and its contemporary deposit is layer (7) sealed by layer (8). STR 35A is a wall having three courses built on the top of layer (8). Its contemporary deposit is layer (7) and it is sealed by layer (6). It belongs to phase I.

KALIBANGAN : 1960-69
DISTRICT HANUMANGARH, RAJASTHAN
KLB-1, TRENCH YF-2, Qd-4
Section Looking North

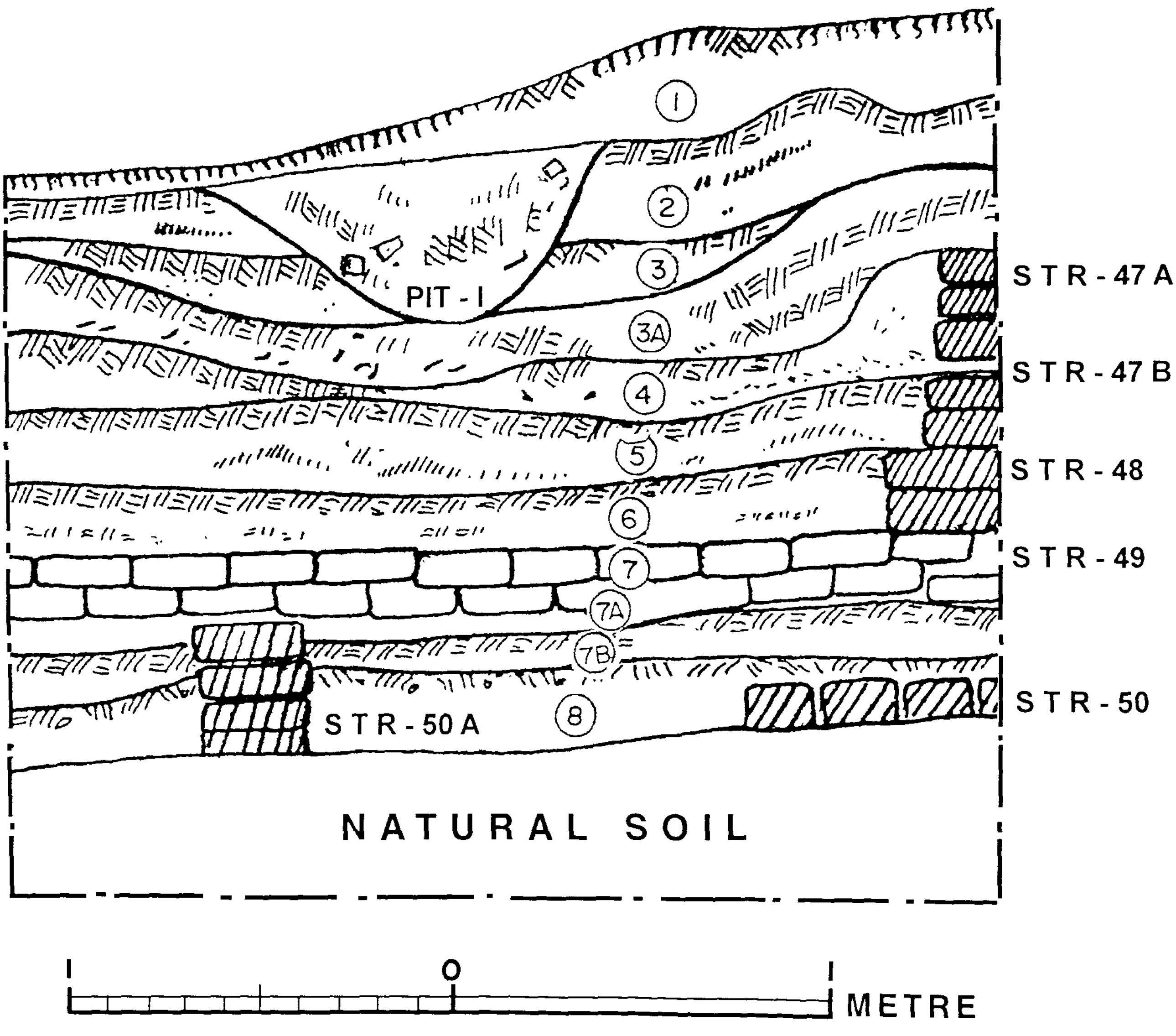
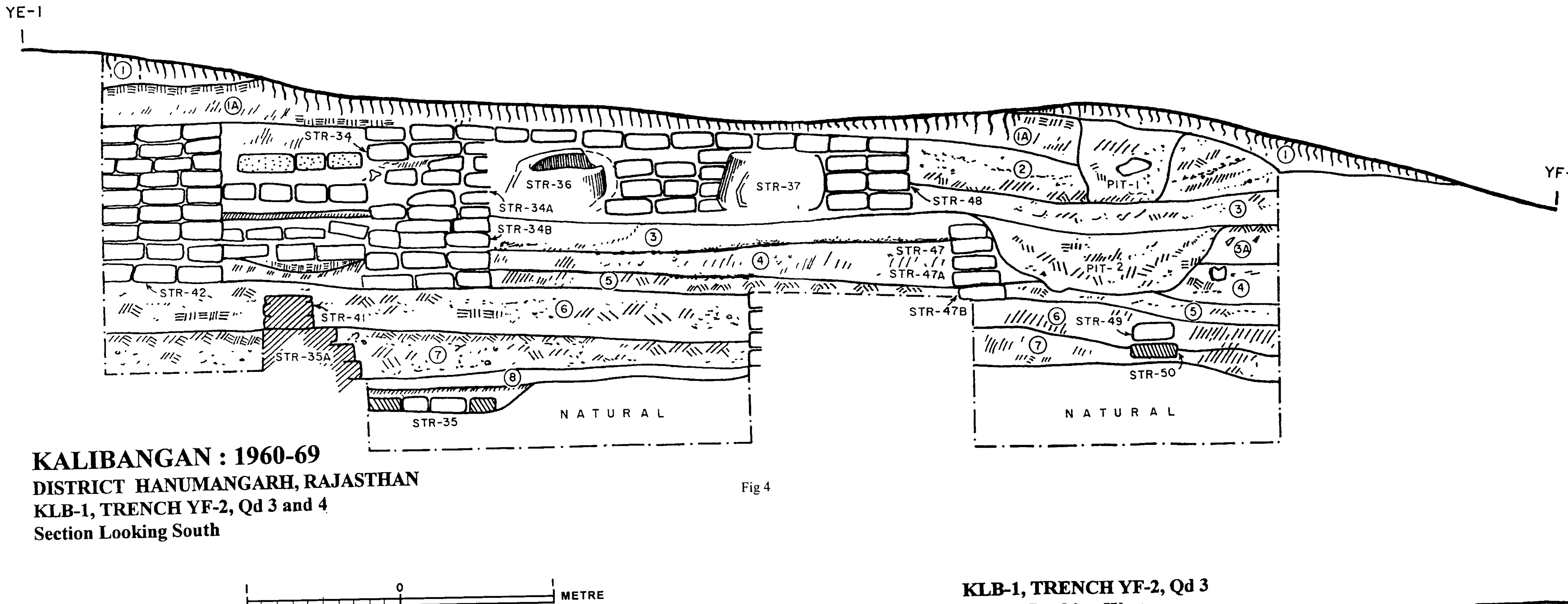


Fig. 3



KALIBANGAN : 1960-69

DISTRICT HANUMANGARH, RAJASTHAN

KLB-1, TRENCH YF-2, Qd 3 and 4

Section Looking South

Fig 4

KLB-1, TRENCH YF-2, Qd 3

Section Looking West

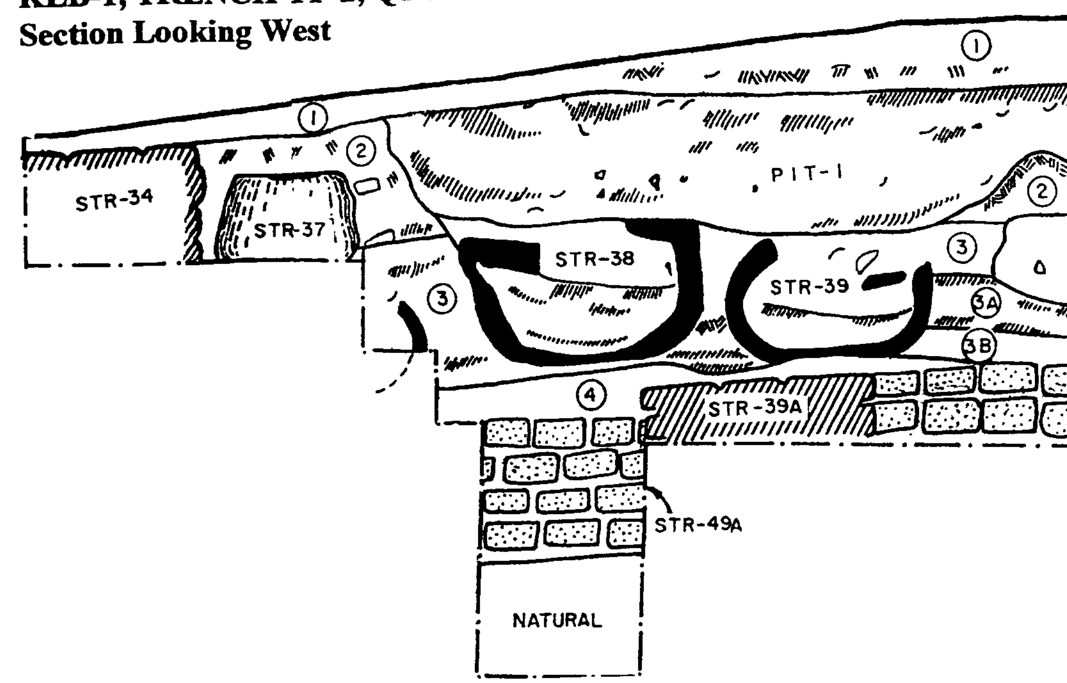
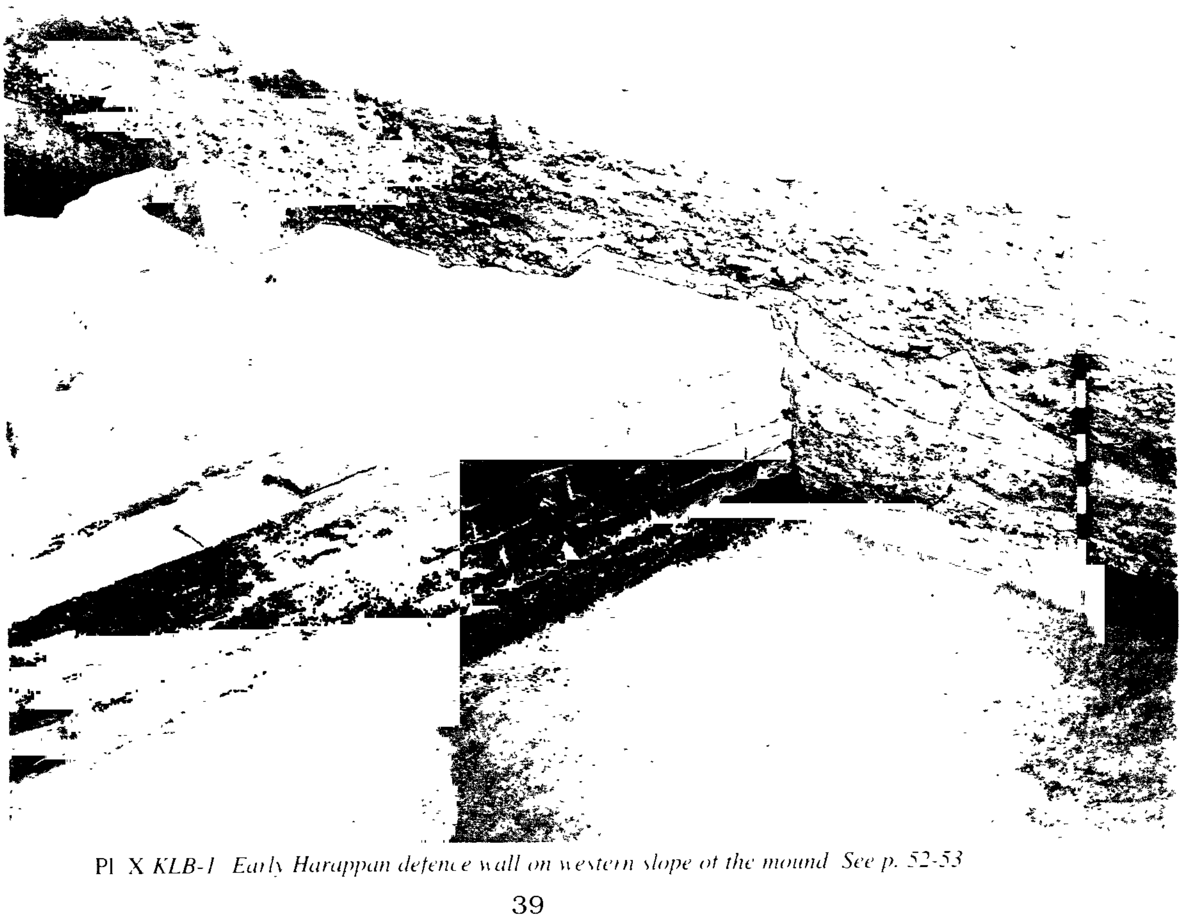


Fig. 5



Pl. IX *KLB-1. Early Harappan defence wall. See pp 52-53*



Pl X *KLB-1 Early Harappan defence wall on western slope of the mound See p. 52-53*

TRENCH YF2, QD 4, SECTION LOOKING SOUTH (FIG. 4)

Layer (1) and (1A) consisting of humus is about 10-40 cm. This layer seals pit no. 1 cut into (2A) and (3). It contains mud-brick pieces, pottery and loose earth. Layer (2) consisting of loose earth and ashy patches has an average thickness of 20-40 cm. Pit no. 2 sealed by layer (3) contains loose earth and ash and it cuts into layer (3A) and (4). Layer (3) and (3A) occurs below layer (2). Both these layers are compact while layer (3A) has loose patches and has potsherds. Layer (3) has a thickness of 15 cm and layer (3A) has a thickness of 15-20 cm. Layer (3A) is a local layer in this section. Layer (4) occurs below layer (3A) and is made of compact earth, ashy patches and charcoal and has a thickness of 20-25 cm. Layer (5) consisting of loose earth and ash, has a thickness of 15 cm. Layer (6) occurs below layer (5). It is a compact layer having a thickness of 20-30 cm. STR 47 is built on layer (5) and sealed by layer (4). This is a wall having three phases. STR 40, 47A and 47B running north-south belonging to phases II, III and IV successively. The bricks of phase III are well preserved while the bricks of phase IV are damaged. Layer (7) occurs below layer (6) has an average thickness 10-30 cm and STR 49 is a wall running east-west, built on the top of layer (6) and sealed by layer (5). Its contemporary layer is (6). STR 50 built on the top of natural soil, sealed by layer (6). ,Its contemporary layers are (7) and (8) and it belongs of phase I.

Pit no. 2 is available in the southern side of the quadrant. It is sealed by layer (4) and is cut into layers (5) and (6). It contains loose earth and burnt material. (not available in this section).

Pit no. 3 is sealed by layer (8). It has two deposits. The upper deposit is whitish and loose and the layer is composed of loose material. The pit consists of charcoal, potsherds and bones. One cup-on-stand with a bright red slip is available with fish scale design. It shows a good degree of perfection. A vase with a thick band near the neck portion is also available.

Pit No. 4 is sealed by layer (8) and cut into the natural soil. A few pieces of animal bones, potsherds have been found along with loose material in this pit.

TRENCH XF2, QD 3, SECTION LOOKING WEST (FIG. 5)

In this section, layer (1) is loose humus having an average thickness of 20 cm. Layer (2) is 40 cm thick and has ash and loose earth in it. Pit no. 1 cut into layer (2) is sealed by layer (1) and it is having loose earth and ash. This section is very interesting as it gives the evidence overground and underground tandoors. STR 37 is a tandoor (overground type), built on layer (3) and its contemporary deposit is layer (2). On the top of layer (4) STR 38 and STR 39 are tandoors that have been also exposed. These are underground tandoors and belong to phase IV. Layer (4) which is compact clay seals STR 49 built on Natural. It is running north-south and belongs to phase I. STR 39A built on layer (5) and (4) is its contemporary layer. It is a wall running east-west and belongs to phase IV.

TRENCH ZG9 & ZH9, SECTION LOOKING NORTH ACROSS THE FORTIFICATION (FIG. 6)

This section gives a clear picture of the Early Harappan fortification wall and also shows how the succeeding Harappans built their fortification.

In this section there are only two universal layers besides one local layer (1A). Layer (1) consisting of loose eroded material with potsherds and small mud-brick debris. This seals the fortification-wall running north-south. It has an average thickness of 20-45 cm. Layer (1A) occurs in the western

side of the quadrant. It consist of ash and charcoal with mud-brickbats. It has an average thickness of 100-80 cm. This is a layer occurring below layer (1). It is a uniform compact burnt clay with chunks. Here, the width of the Early Harappan fortification is 4 m. The Harappans have added a revetment on the west having a width of 75 cm and on the east 1.55 m. The Harappan revetment is cut into the deposit against Early Harappan fortification (STR III C).

TRENCH YA17, QD 1, SECTION LOOKING WEST ACROSS ENTRANCE (FIG. 7)

This is a section showing the entrance in YA17, Qd 1. This section has been taken diagonally to project both the sides of the entrance. The original gap in phase I is 2.70 m in the rampart of Early Harappan period. The intervening space is filled up with layers. The defence wall is 2.20 m thick. Due to some catastrophe one side gave way as the tilt of the bricks of the wall suggests. In this section layer (1) is the humus and tallus material. It has an average thickness of 5-12 cm. Layer (2) occurs below layer (1) and is 10-15 cm in thickness and it rests against STR 4A. STR 4A is built on layer (6) and sealed by layer (1). This STR 4A has two phases. The later one is built on 4A. Similarly STR 4B is other end of the entrance which is built on layer (6) and sealed by layer (1). It has two phases and has a tilt and has 9 courses. Top of (4A) appears to be the beginning of the second phase. Layer (3) is having loose earth, mud-brick pieces and potsherds and it is a 12-40 cm in thickness. Layer (4) occurs below layer (3) and consists of compact earth and of mud-brickbats. It is 25 cm thick. Layer (4A) occurs below layer (4) and consists of hard earth and bands of ash. It is 20 cm thick. Layer (5) is a broad layer, having big chunks of mud-bricks and compact earth which could be used as a packing material. Layer (5A) is a local layer having a thickness of 35 cm. It is tilted layer probably part of layer (5). Layers (4), (4A), (5) and (5A) are the fallen layers which show tilt on the northern side. Layer (6) is a universal layer and consists of hard compact earth. It is 15 cm thick over which the rampart has been built. Layer (7) has compact earth, chunks and ash. It is a pre-rampart layer, may be a temporary settlement. It is 15 cm thick. Layer (8) consists of fine water borne sand deposit just above the Natural. Digging has been carried out in this trench upto a depth of 2 m.

TRENCH XE1, QD 3&4, SECTION LOOKING SOUTH (FIG. 8)

This is a section showing subsidence of strata and structures due to an earth-quake which came at the end of fifth structural phase of Early Harappan times.

Layer (1) consists of humus and top soil. It is 20 cm wide. Most of the layers are eroded. Layer (2) consists of loose earth and potsherds. It is 20 cm thick. It is also eroded. Layer (3R) has two floors one brown and other ashy and black. These do not behave horizontally. This layer is disturbed and makes a fault which looks like a step. There is also a burnt brick in it (10x20x30). The faulted layer is 30 cm in thickness. The layer (4R) is also a disturbed layer and it is a faulted layer. It consists of ashy patches, charcoal and compact earth. It is 25 cm wide. Layer (5R) occurs below (4R) which is also disturbed and has faulted. It has a thickness of 20-60 cm. It is made of compact clay having burnt patches and is sagging due to the presence of a pit below, having whitish material and ash. The section has a very large Pit no. 4 cut into layers (6R), (6RA) to (6RD) and in the Natural upto a depth of 1 m. It is sealed by (5R). This pit consists pieces of mud-bricks, potsherds, ash, charcoal, bones and lime-plaster. This pit could be a silo? STR 65A is slightly tilted in its upper courses and belongs to phase V and shows a cleavages. STR 65B belongs to phase IV which is affected. It is built on layer (6RA). STR 65C is built on layer (6RC) and sealed by layer (6RA). It belongs to phase III. It is running east-west. STR 64 is built on layer

(6RD) and sealed by layer (6RB). It belongs to phase IV. It has one course. STR 6RD built on Natural and sealed by layer (6RC). It is running east-west and belongs to Phase I.

Pit no. (1) sealed by top humus cut into layers (3R), (4R) and (5R). Pit no. 2 is cut into layers (2R) and (3R) and sealed by layer (1). Pit no. (3) from top and cut into layers (1), (4R), (5R) and (6R).

TRENCH ZB1, QD 2&3, SECTION LOOKING EAST (FIG. 9)

This is an important section revealing the stratigarphical position of the Early Harappan fortification and its two phases. Layer (1) is humus and is having an average thickness of 5-15 cm. Layer (2) which occurs below layer (1) is a thick loose earth with mud-brickbats and is having a thickness of 50-60 cm. Layer (3) occurs below layer (2) and is having a thickness of 15-30 cm, consisting of ash, charcoal, brickbats, and pottery. The Harappan revetment to Early Harappan fortification of phase II is built on the top of this layer. Layer (4) occurs below layer (3). It is 15 cm thick and having patches of ash and loose earth.

Layer (5) occurs below layer (4) and is having a thickness of 10-20 cm and consists of hard brownish earth. Layer (6) and (6A) occur below layer (5) and layer (6) is having a thickness of 10-20 cm and consists of sand. Layer (6A) is a local patch which has an average thickness of 15 cm. Layer (7) is 20 - 30 cm thick, consisting of ash, charcoal and potsherds. This is a layer in which STR 4A (Early Harappan fortification phase II) has been built by making a foundation trench. This structure is sealed by layer (4) and its contemporary layers are (5) (6) and (6A). It has in this part five courses of bricks. Layer (7A) is a local layer having a thickness of 5-10 cm. Layer (8) occurs below layers (7) and (7A). It is 15-30 cm in thickness and contains good quantity of ash, charcoal and potsherds. Layer (9) is floor having a thickness of 5-7 cm of rammed earth. Layer (10) occurs below layer (9) and is the habitational layer over the Natural soil. STR 4 (first phase of the Early Harappan fortification) is built over the Natural. The fortification is cut into layer (10) and the rammed floor is contemporary to it. Layer (8) is also a contemporary deposit and layer (7A) seals the structure. Here, there are five courses of mud-bricks.

TRENCH YG1 & YH1, SECTION LOOKING SOUTH (FIG. 10)

This is a section which gives an idea of the thickness of Early Harappan fortification. Layer (1) consists of loose earth and humus. It is 30 cm thick. Layer (2) which occurs below layer (1) is 20-40 cm in thickness and contains clayey compact chunks and loose earth with eroded material. Layer (3) is having compact earth and is of 25 cm thick. Here we find that Early Harappans built a rampart having a width of 3.80 m on an eroded Natural surface.



KALIBANGAN : 1960-69
DISTRICT HANUMANGARH, RAJASTHAN
KLB-1, SECTION ACROSS FORTIFICATION-WALL
TRENCH ZG-9 & ZH-9
Section Looking North

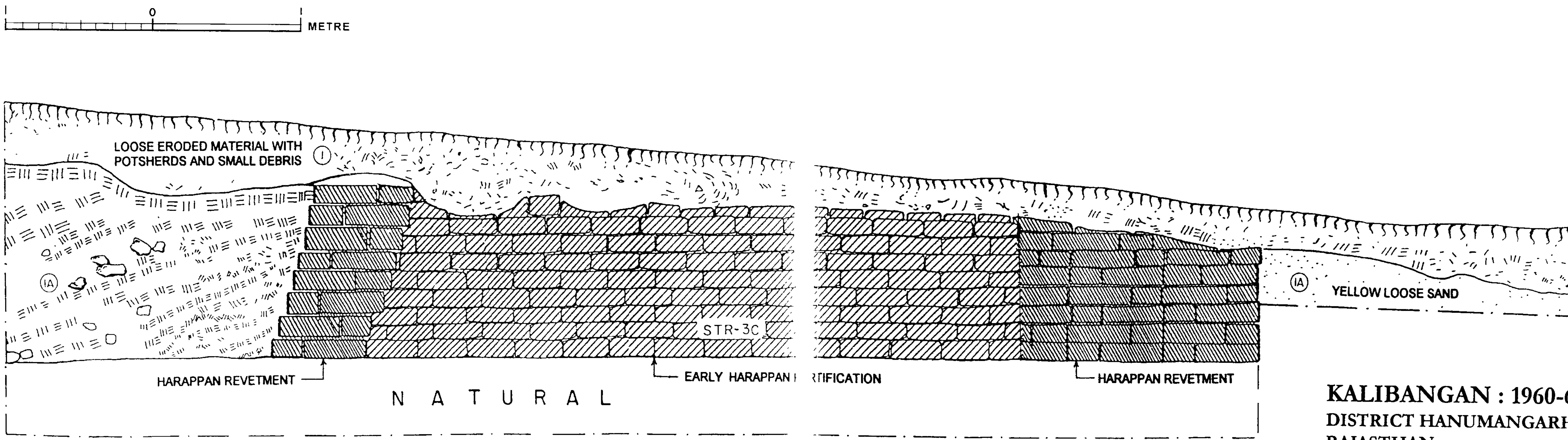


Fig. 6

KALIBANGAN : 1960-69
DISTRICT HANUMANGARH, RAJASTHAN
KLB-1, TRENCH YA-17, Qd-1
ACROSS ENTRANCE

Section Looking North West

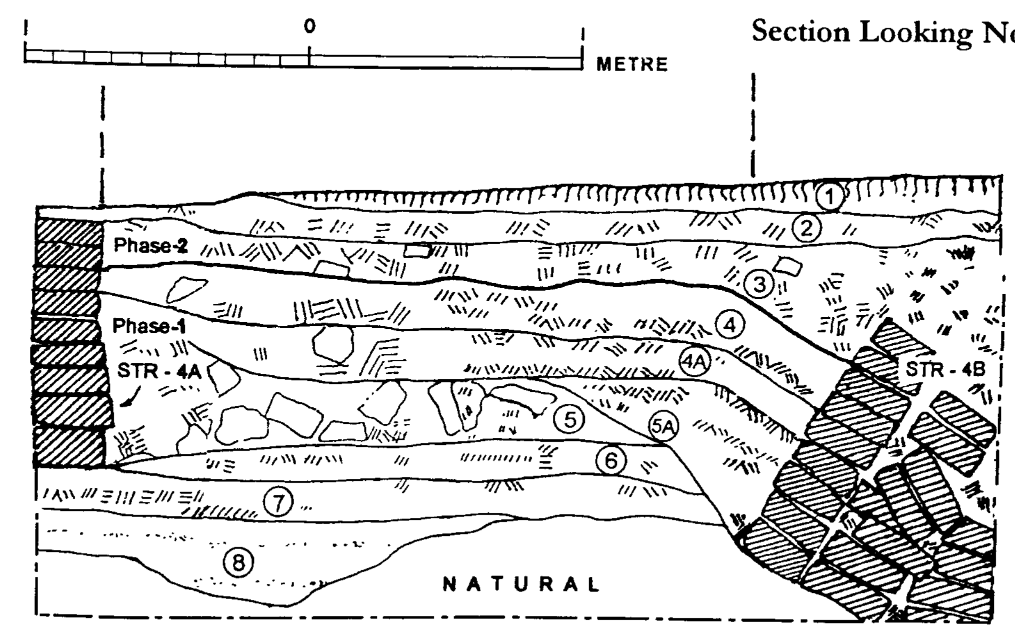


Fig. 7

KALIBANGAN : 1960-69
DISTRICT HANUMANGARH, RAJASTHAN
KLB-1, TRENCH XE-1, Qd 3 and 4
Section Looking South

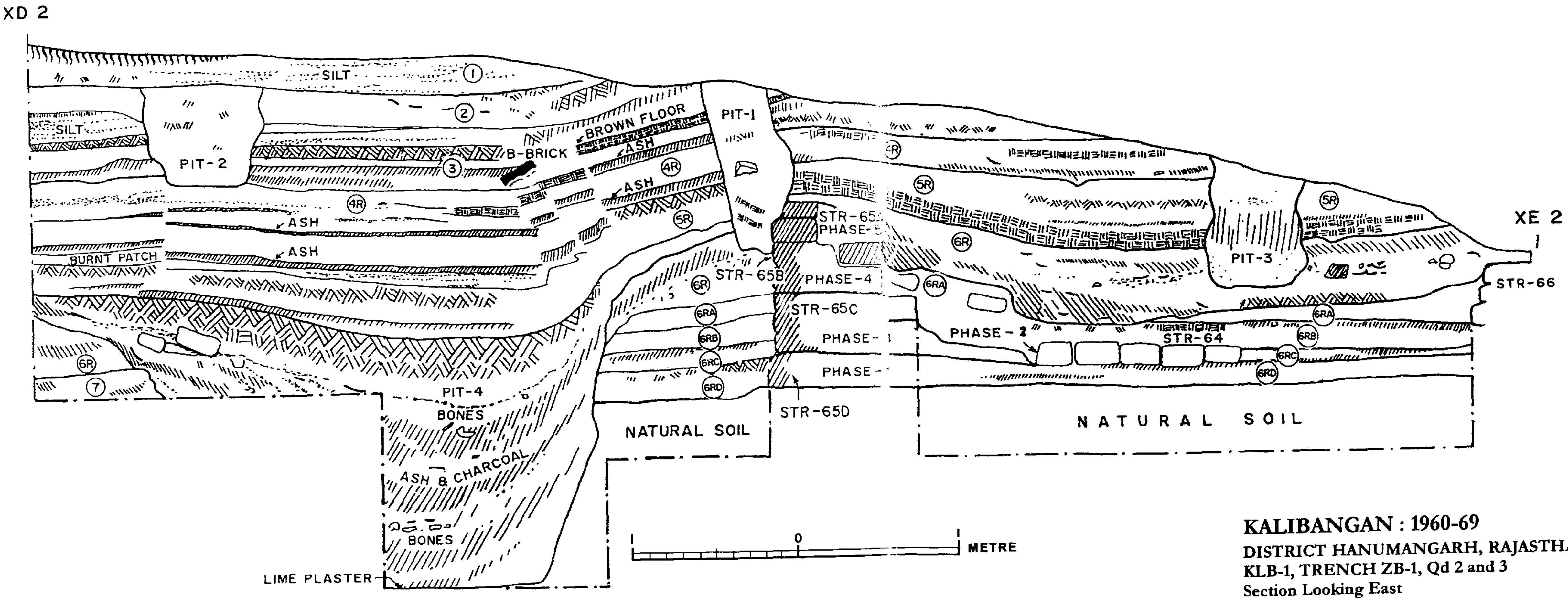


Fig. 8

KALIBANGAN : 1960-69
DISTRICT HANUMANGARH, RAJASTHAN
KLB-1, TRENCH ZB-1, Qd 2 and 3
Section Looking East

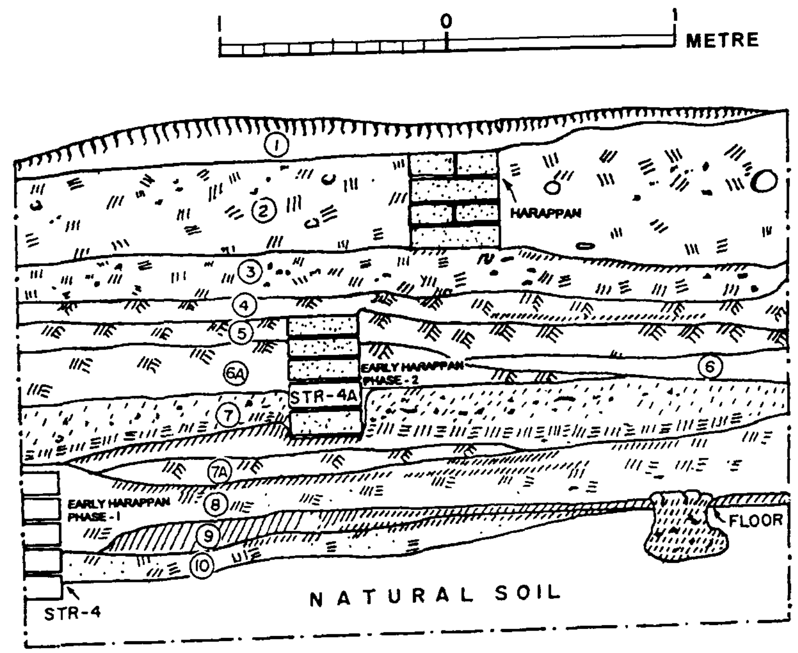


Fig. 9

KALIBANGAN : 1960-69

DISTRICT HANUMANGARH, RAJASTHAN

KLB-1, TRENCH YG-1 & YH-1

Section Looking South

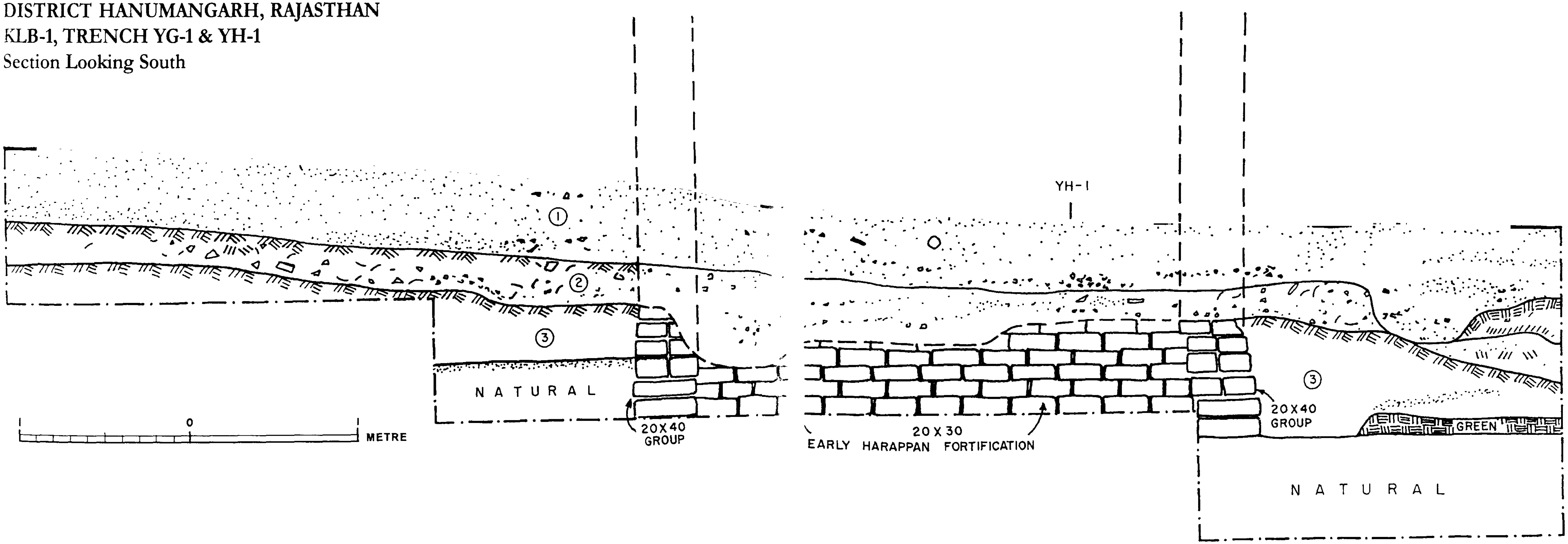
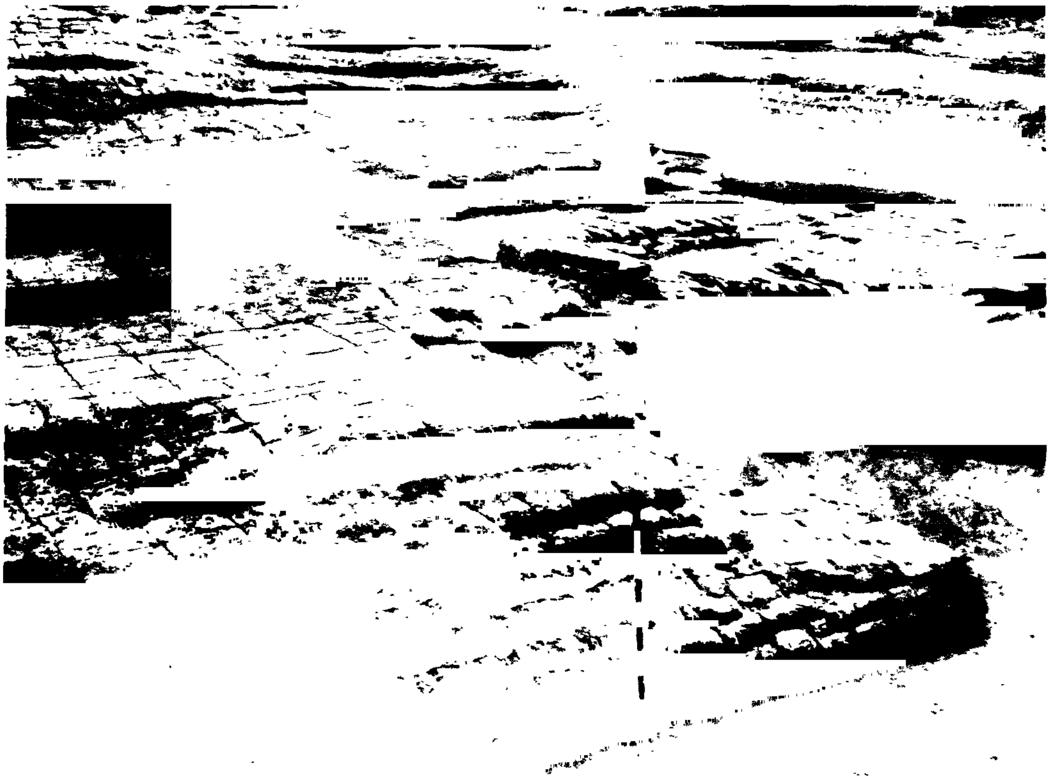


Fig. 16



Pl. XI *KLB-1: Early Harappan wall below Harappan defence wall. See p. 53*



Pl. XII *KLB-1: Early Harappan defence wall. See p. 53*



Pl. XIII *KLB-1: general view of excavated house-complexes.* *See p. 53*



Pl. XIV *KLB-1 five phases of Early Harappan constructional activity.* *See p. 53*

STRUCTURES

7

Jagat Pati Joshi

GENERAL OBSERVATIONS

The site at Kalibangan comprises of three mounds with the smaller designated as KLB-1 located to the west and the larger designated as KLB-2 to the east, KLB-3 a law mound is further east of KLB-2. The settlement is situated at the bend of river Sarasvati beyond the active flood plain. The KLB-1 mound is roughly a parallelogram, some 250 m from north-to-south and 180 m from east-to-west. At the outset it must be conceded that the Early Harappan occupation in both the mounds is considerably eroded on the periphery of the mounds resulting its having very little occupational deposit. However, in the mound KLB-1, in some of the central areas the maximum Early Harappan deposit is 1.65 m. This deposit is overlain by the massive structures of the Harappan period. While there is a clear cut horizon of Early Harappan structures in KLB-1, in KLB-2 there has been an overlap of Early Harappan and Harappan cultures right from the beginning. KLB-2 has not yielded any Early Harappan structures exclusively. The Early Harappan pottery continues with the Harappan in that mound upto the middle level. KLB-3 has yielded ritualistic structures such as fire-altars and the pottery consists of mainly the Harappan pottery but few early Harappan sherds are also found in the *milieu*.

For the purpose of Early Harappan Culture, the excavations at KLB-1 have been very rewarding. As has been said earlier, the area of excavation was scattered and overlying Harappans structures did not allow the spade to expose these fully.

The excavations brought to light in KLB-1 the existence of a fortified citadel with an entrance in its northwestern side overlooking the river Ghaggar (Sarasvati), evidently the prime source of water and communication for the settlers. The houses were built inside the fortified township and outside there was a large area for agriculture. This is attested [illegible] remains of a ploughed field. The excavations of the following trenches have given the evidence of structural activity of the Early Harappans :

E1, E2, E4, E5, F1, D1, XA5, XC1, XD1, XD4, XE1, XE6, XE7, XF1, XF2, XG1, YA1, YA17, YA18, YB17, YE18, YF1, YF2, ZA1, ZA2, ZA17, ZA18, ZB8, ZB9, ZC2, ZC3, ZD2, ZE2.

CARDINAL FEATURES OF STRUCTURAL ACTIVITY OF EARLY HARAPPANS

1 The settlement was in shape of a parallelogram having a gateway in the northwestern side.
2 Generally, four to five phases of structural activities are available.
3 Structures do not follow strict cardinal directions and run slightly oblique.
4 In all the five phases the obliqueness is not maintained and it has been changing thus, showing lack of structural maturity.
5 Two to three projections are available in the outer and inner side of the walls.
6 Mostly sundried bricks having the ratio of 1:2:3 have been used.
7 Four burnt bricks have been found (size 27 x 17 x 09) cm in the drain.
8 Greyish clayey plaster has been used inside and outside the walls including the rampart.
9 In the construction generally English bond has been used.
10 A grey ashy mortar has been used.
11 Walls having a width of one and three bricks have been found.
12 In some trenches the walls have been

found sagged due to subsisdence which might (pl. XXIV-XXV) be consequential to earthquake. In some walls the effect is seen in the zig-zag alignment of bricks. The structures of the last phase are overlaid with a fine sand showing a short period of the non-occupation.

13 Generally foundation trenches are not available, however, in YF2 two such instances of foundátion trenches are recorded.

14 Evidence of burning is also available.

15 Floors made of hard earth and bricks on edge have been noticed in XF2, Qd2.

16 A *kachcha* drain with two bricks placed at the sides has also been noticed.

17 Underground and aboveground tandoors have been found.

18 It has been observed that the house complexes had living rooms on one side, one dining and kitchen in the.other with a *angan* or open space in between.

19 The houses were built on both sides of the lane/street.

The excavated structures have been classified as below :

(i) Citadel
(ii) Rampart or fortification wall
(iii) Entrance
(iv) House-complexes
(v) Lanes/Streets
(vi) Ovens or tandoors

SETTLEMENT

The Early Harappan settlement inside the citadel was situated on the bend of the river beyond the active floodplain and was in the shape of a parallelogram about 250 m north-south and 180 m from east to west. The entire settlement right from the beginning of the occupation has been found to be fortified. It has been built over the Natural soil. The citadel has a fortification and gateway within which the house-complex and lanes were situated. Excavations carried out in the trenches : ZB-20, ZB19 Qds 2 and 3, ZA19 Qds 2 and 4, ZA18 Qds 2 and 4, YA18 Qds 3, YXA17 Qds 1, 2 and, ZC 20 Qds 1, 3, and ZB20 Qds 3 and 4 for tracing Early Harappan fortification.

FORTIFICATION WALL (pls. VIII, IX & X)

The main purpose in taking up these trenches on the north-west corner of the KLB-1 mound was to trace the Early Harappan fortification wall which was first traced in the western side. The wall running east-west was traced in the northern side. Towards the north-west corner of the mound excavating in trenches ZB19 Qds 2 and 3, the turning of the fortification wall was traced. Here, the wall is oriented from north-east to south-west. Initially it was seen on plan that the Early Harappan wall with bricks measuring 10 x 20 x 30 cm was widened by the addition of some courses of bricks measuring 10 x 20 x 40 cm (i.e. Harappan). In all about four courses, bricks measuring 10 x 20 x 40 were exposed in section. This Harappan wall overrides a big hearth in this trench. It was decided to reach Natural soil taking a small area in the northeastern corner of this trench. In this process the layers running below the Harappan wall were undercut in the form of a tunnel up to a depth of about a metre and at this point as indicated on plan, the back of the Early Harappan fortification wall with five courses of bricks measuring 10 x 20 x 30 cm was encountered. This wall was found resting not on Natural soil but on occupational layer. Probing further down, the occupational layer were again undercut in the form of a tunnel to a depth of about a metre and half where, was encountered the back face of an Early Harappan wall resting right on the Natural soil. Five courses of bricks measuring 10 x 20 x 30 were exposed. (pl. VIII)

Excavating in Qds 2 and 3 of the said trench ZB20, the outer face of the fortification wall at the turning point was traced. On the outer face only one course of brick was

encountered. Since good layers and a number of courses of bricks were available on the back face of the wall, it was decided to chase the back of the fortification wall, in the process trenches ZB19, Qd 4; ZA18, Qds 2 & 4; YA17, Qds 1, 2 & 4 were opened. In trenches ZA18, Qds 2 & 4 a good height of the back face with six to seven courses of bricks measuring 10 x 20 x 30 cm were available. In this trench YA17, Qd 2 the back face is also eroded by the raingully. There are only few courses of bricks which were available (pl. IX).

In the northwestern side where the entrance is situated and in the northern side the fortification wall has been found running substantially below the Harappan rampart in B20, ZD19 to ZK19 and ZJ19. In the north western side the Early Harappan defences were found in the Sq YB2 which has two constructional phases. The front face falls just in peg line near the section looking west where as it was due south-east making an angle of 30° with the peg line. In Sq YF18 the inner and outer faces of the fortification wall has been brought to light. Five courses of the earlier phase of the fortification wall are available. The fortification wall is also traced in the western and southern sides. In the eastern side it is traceable to a length of 30 m (YH12, YH3, YH4 and YH6).

As mentioned above, in ZB20 two phases of the Early Harappan fortification below the Harappan fortification are available. Here, the wall takes a turn towards east. Here, the width of the fortification is 1.90 to 2.20 m. This could be detected after digging below the Harappan fortification. The brick size was 10 x 20 x 30 cm (pls. X and XI).

Thus the fortification wall was made of mud-bricks (size 10 x 20 x 30 cm; proportion 1:2:3) and in its instant position has two phases. In the earlier phase the basal width was 1.90 - 2.20 m and in the later it measured 3.60 to 4.20 m. The extra thickness being added in the inner side (ZB19, ZC19 and XH4). Both the inner and outer faces of the wall seem to have been originally plastered with mud, patches of it which were found preserved at many places. The fortification wall has eight to ten courses (pl. XII).

ENTRANCE

In the northwestern side of the citadel there is an entrance which has been located in YA17, Qd 1 & 2 having a gap of 2.70 m in the fortification wall. Here, front and back of the pre-Harappan fortification which make square ends on either side to make an entrance or postern for the river side. It was found that the intervening space was filled up with layers. This entrance belongs to the earlier phase. Then the width of the entrance was 1.90 - 2.20 m wide. When a severe catastrophe occurred and it was blocked by packing material and then the later phase was used with minor alterations (fig. 7).

HOUSE-COMPLEXES AND ROOMS (PL. XIII)

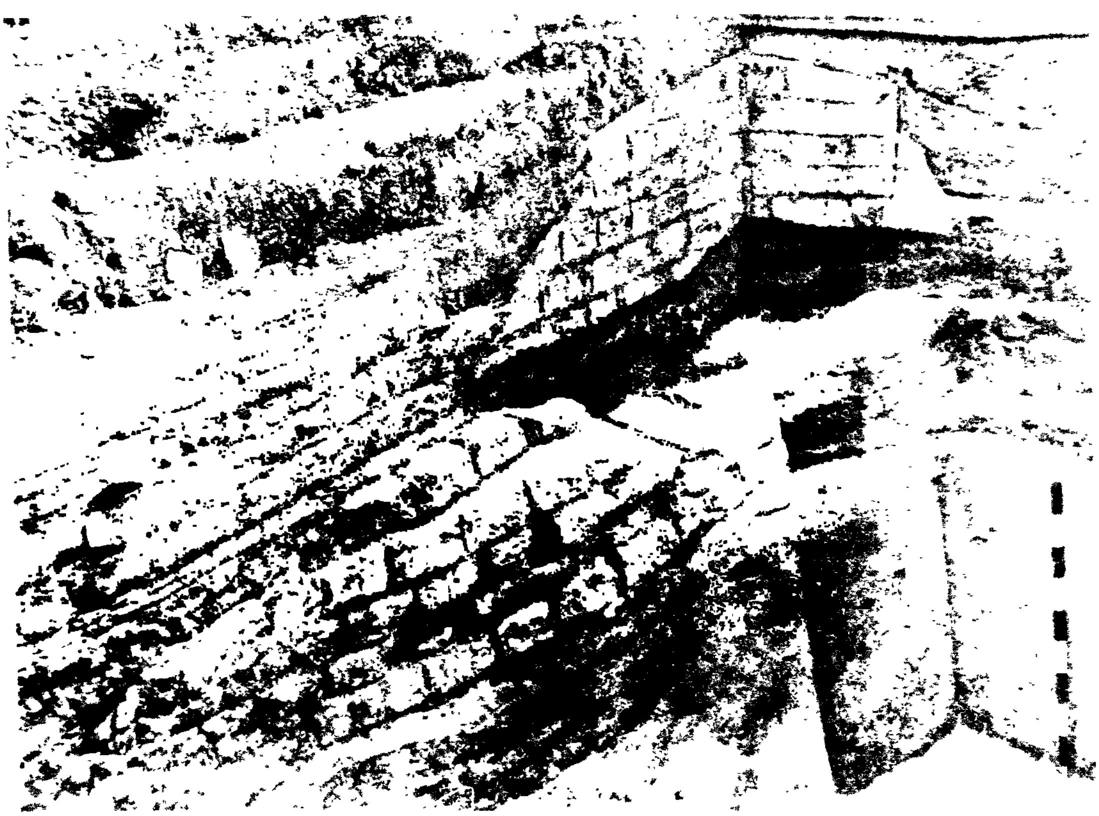
Generally four to five phases of constructional activity is seen (pls. XIV and XV). Within the walls once the houses were built of mud-bricks of the same size as those used in the fortification wall, the masonary being in English bond with alternate courses of headers and stretchers. The use of baked bricks is also attested to by a drain. The size of bricks being the same as that of mud-bricks. In the limited area of excavation (largely on the slope of the mound) it was not possible to expose complete house plans nor was it feasible to dig at other places for it would have involved removal of superimposed Harappan deposits. Nevertheless, it was apparent that a house consisted of three to four rooms with a courtyard and a kitchen with tandoors (pls. XVII, XVIII, XIX, XX) possibly with an attached dining room. The kitchen was invariably to the northern side of the house-complex in all the three phases. The location

of the kitchen was away from the living rooms to ward-off smoke, etc. There is an evidence of bathroom with platforms of bricks on edge. Drains of *kachcha* bricks and burnt-bricks are available (pls. XVI & XXI).

In Sq E1 and D1 digging has been very rewarding as it has brought to light part of a lane 1.5 m wide running eastwest though not in cardinal direction (pl. XXI). On both sides of the lane there are walls of the houses. In the plan itself there could be seen two structural phases. First represented by the walls and lane (width 1.50 m), second by the extension of walls, making a room in the northeastern side. width of the rooms are 2.65 m, 1.90 m and 1.30 m. A complete room admeasures 1.20 m x 1.40 m and bricks measuring 30 x 20 x 10 cm have been used. The structures built above the Natural soil, have four to five layers of contemporary deposits. Similarly in trench ZE4, Qd 2 & 3, a slightly curved street with houses/rooms on both sides are available. Generally the width of the street/lane is 1.40 m - 2 m.

On the western side of the mound large number of wall of the houses having 4-5 structural phases have been found which confirms to considerable structural activity in the habitation. Here, stratigraphical evidence is available from the first structures built on the Natural to the end of structural activity in XE 2 where unfortunately due to an earthquack it appears that the Early Harappan habitation came to an end or abandoned.

In this side the mud walls of the house-complexes are available in trenches YF2, YF1, XF1, YE1, XE1, XD2, XD1 and XD1. In trenches YE1, XD1, XE1 and XD1 there has been great structural activity during the Early Harappan times.



[illegible] Harappan [illegible] two phases See p 53

CATALOGUE OF STRUCTURES

1. STRUCTURE NO. EH-IA & IB : FORTIFICATION WALL [FIG. 11]

1. Location : Square no. YH4, Quadrant no. 3 & 4
2. Type of structure : Fortification wall
3. Stratigraphic position : Built on layer (7) and sealed by layer (3) also covered by Harappan fortification
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure : (a) length 4 to 4.50 m (b) width 3.70 m (c) height 1 m
6. Number of courses : nine-ten courses
7. Masonry and bond : English bond, headers and stretchers
8. Composition of plaster : Mud-plaster
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) width 20 cm (c) thickness 10 cm
12. State of preservation : Good
13. Shape and other distinguishing feature : Harappans have used this portion of the fortification by rivetting two courses in the width. STR IB is the eroded portion of the fortification.

2. STRUCTURE NO. EH-2A & 2B [FIG. 12]

1. Location : Square no. ZK18 & ZX19, Quadrant no. 1 & 4 respectively
2. Type of structure : Fortification
3. Stratigraphic position : Both STRs are built on Natural soil, sealed by layer (1) and contemporary layer (4)
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : STR 2A (a) length.90 m (b) width (exposed).30 m (c) height .30 m; STR 2B (a) length 3.80 m (b) width.20 m on the top (c) height.30 m, total width 3.20 m.
6. Number of courses : STR 2A - 3; STR 2B - 3
7. Masonry and bond : headers and stretchers
8. Composition of mortar : Earth with grit
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) width 20 cm (c) thickness 10 cm
12. State of preservation : Fairly preserved

3. STRUCTURE NO. EH-2C & 2D [FIG. 12]

1. Location : Square no. ZK-19, Quadrant no. 4
2. Type of structure : Fortification
3. Stratigraphic position : Both STRs are built on layer (7) sealed by (4) (6A) and (5) are its contemporary layers.
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure : STR 2C (a) length 4.50 m (b) width.40 m (c) height.60 m; STR 2D (a) length 2.80 m (b) width 30 m (c) height 30 m
6. Number of courses : STR 2C - 6; STR 2D - 3
7. Masonry and bond : headers and stretchers
8. Composition of mortar : Earth with grit
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. State of preservation : Fairly preserved

4. STRUCTURE NO. EH-3A [FIG. 13]

1. Location : Square no. ZB-20, Quadrant no. 3, ZC-19, Quadrant no. 3 & 4
2. Type of structure : Fortification wall
3. Stratigraphic position : Built on layer (8) and sealed by layer (6)
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 4 m (b) width 1.35 m (c) height 0.60 m
6. Number of courses : six courses
7. Masonry and bond : English bond
8. Composition of plaster : Clay mixed with earth

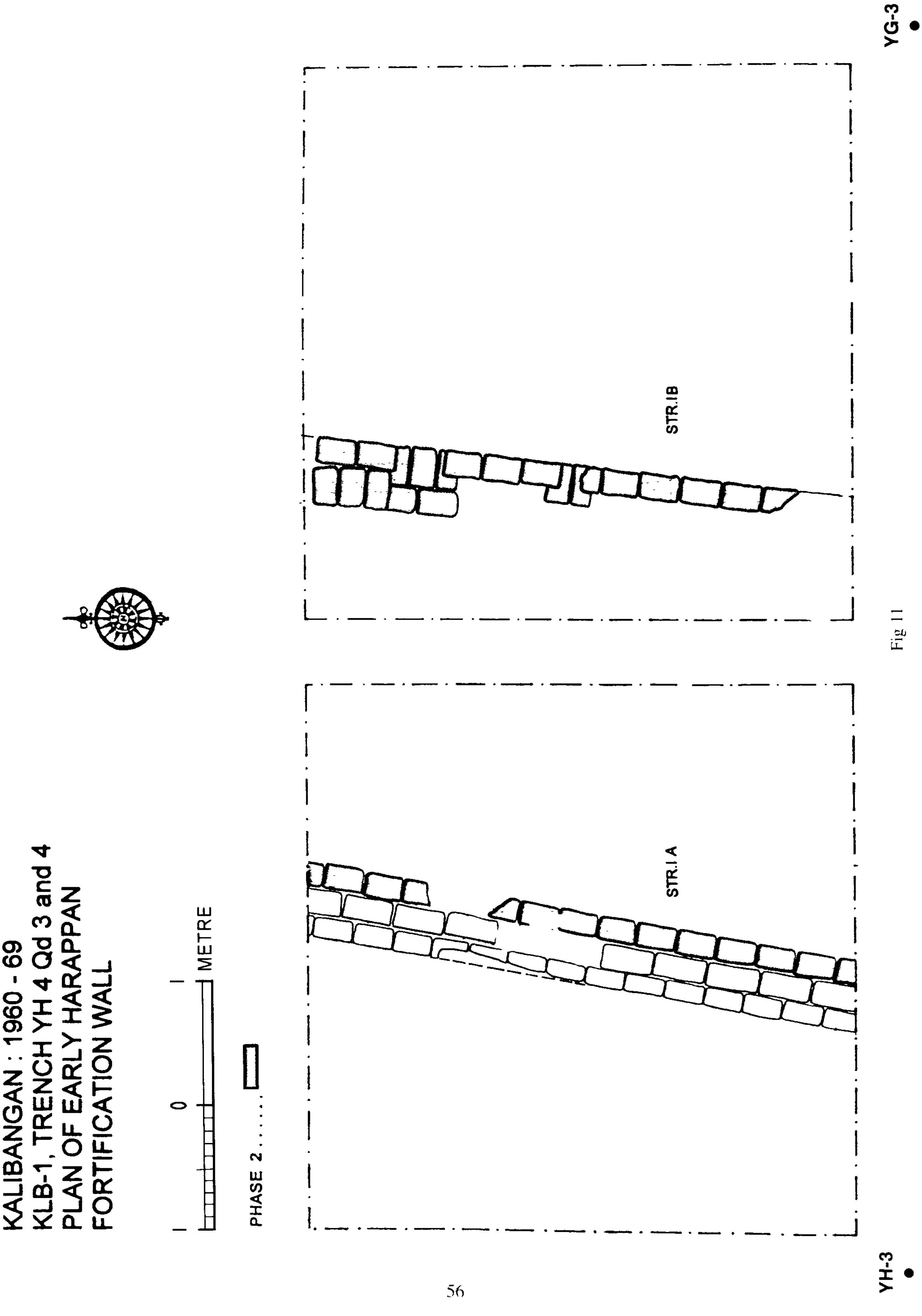

KALIBANGAN : 1960 - 69
KLB-1, TRENCH YH 4 Qd 3 and 4
PLAN OF EARLY HARAPPAN
FORTIFICATION WALL
1
0
1 METRE
PHASE 2
STR.I A
STR.I B
YG-3
YH-3

Fig 11

9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. State of preservation : Good condition

5. STRUCTURE NO. EH-3B

1. Location : Square no. ZB-20, Quadrant no. 3
2. Type of structure : Fortification wall
3. Stratigraphic position : Built on layer (6) sealed by layer (4)
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure : (a) length 4.00 m (b) width 1 m (c) height 0.40 m
6. Orientation of longer axis : east-west
7. Nature of bricks used : Mud-bricks
8. Dimension of bricks : (a) length 30 cm (b) width 20 cm (c) thickness 10 cm
9. State of preservation : Fairly good. The fortification has been used by Harappans in both sides.

6. STRUCTURE NO. EH-3C

1. Location : Square no. ZD19, Quadrant no. 3 and 4
2. Type of structure : Fortification wall
3. Stratigraphic position : Built on Natural soil sealed by layer (1)
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 7.25 m (b) width (exposed) 4 m (c) height 0.90 m
6. Number of courses :eight to nine courses
7. Masonry and bond : header and stretchers
8. Composition of mortar : Grayish earth
9. Orientation of longer axis : north-south. The fortification has been exposed upto the length of 40 m which included the Harappan additions in trenchs ZH-9, ZH-11 and ZH-12
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. Any other details regarding bricks and state of preservation and shape and other distinguishing feature : Well preserved and on both sides additions have been done by the Harappan in the shape of fortification.

7. STRUCTURE NO. EH-4A [FIG. 14]

1. Location : Square no. YA17, Quadrant no. 2
2. Type of structure : One arm of the entrance
3. Stratigraphic position : Built on layer (6) sealed by layer (1)
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 3 m (b) width (exposed) .60 m (c) height .50 - .60 m
6. Number of courses : nine courses
7. Masonry and bond : header and stretchers
8. Composition of mortar : Earth mixed with charcoal
9. Orientation of longer axis : north-east to south-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. State of preservation : Not fully exposed.

8. STRUCTURE NO.EH-4B [FIG. 14]

1. Location : Square no. YA17, Quadrant no. 1
2. Type of structure : Another arm of Entrance
3. Stratigraphic position : Built on layer (6) sealed by layer (1)
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 2.65 m (b) width 2 m (c) height.60 cm
6. Number of courses : nine courses
7. Masonry and bond : header and

stretchers
8. Composition of mortar : Earth mixed with burnt material
9. Orientation of longer axis : south-west to north-east
10. Nature of bricks used : Mud brick
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. State of preservation : Well preserved
13. Shape and other distinguishing feature: The Early Harappan defences make a square turn at both ends STR 4A and STR 4B on either side with an entrance of 2.70 m having two phases.

9. STRUCTURE NO. EH-5 [FIG. 15]

1. Location : Square no. E1, Quadrant no. 1 and 2
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (4), Layer (1), (2) and (3) are contemporary to it.
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 4.25 m (b) width 0.30 m (c) height .10 m
6. Number of courses : Single course
7. Masonry and bond : headers
8. Orientation of longer axis : east-west
9. Nature of bricks used : Mud-bricks
10. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
11. Any other details regarding bricks and state of preservation : The bricks have been very much eroded.

10. STRUCTURE NO. EH-6 & 6A & 8A

1. Location : Square no. E1, Quadrant no. 1 and 2
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (4), Layers (1), (2) and (3) are contemporary
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 6.20 m (b) width .30 m (c) height .20 m
6. Number of courses : Generally one but at places two
7. Masonry and bond : headers
8. Orientation of longer axis : east-west
9. Nature of bricks used : Mud-bricks
10. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
11. Any other details regarding bricks and state of preservation : Bricks are eroded.

11. STRUCTURE NO. EH-7

1. Location : Square no. E1, Quadrant no. 1
2. Type of structure : Wall
3. Stratigraphic position : It is built on layer (5N) and layers (2N), (3N) and (4N) are contemporary
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 6.40 m (b) width 0.30 m (c) height 0.10 m
6. Number of courses : One course
7. Masonry and bond : header
8. Orientation of longer axis : east-west
9. Nature of bricks used : Mud-bricks
10. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
11. Any other details regarding bricks and state of preservation and shape and other distinguishing feature : Bricks are eroded.

12. STRUCTURE NO. EH-8B

1. Location : Square no. E1, Quadrant no. 1
2. Type of structure : Wall
3. Stratigraphic position : It is built on layer (4N), Layers (3N) and (2N) are contemporary to it.
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 2.7 m (b) width 0.30 m (c) height 0.10 m
6. Number of courses : One
7. Masonry and bond : header
8. Orientation of longer axis : east-west
9. Nature of bricks used : Mud-bricks

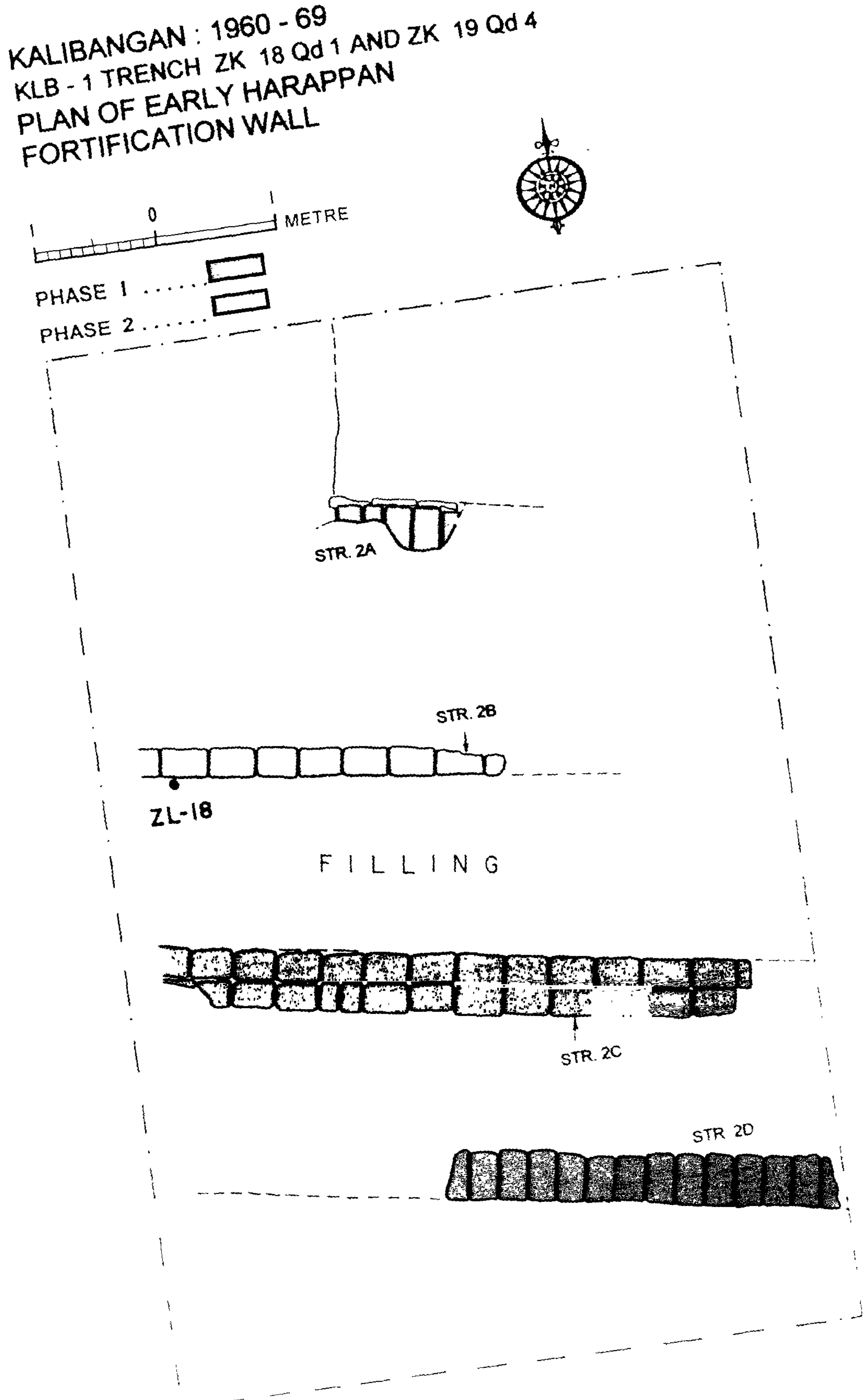

KALIBANGAN : 1960 - 69
KLB - 1 TRENCH ZK 18 Qd 1 AND ZK 19 Qd 4
PLAN OF EARLY HARAPPAN
FORTIFICATION WALL
0
1
METRE
PHASE 1
PHASE 2
STR. 2A
STR. 2B
ZL-18
FILLING
STR. 2C
STR 2D

Fig 12

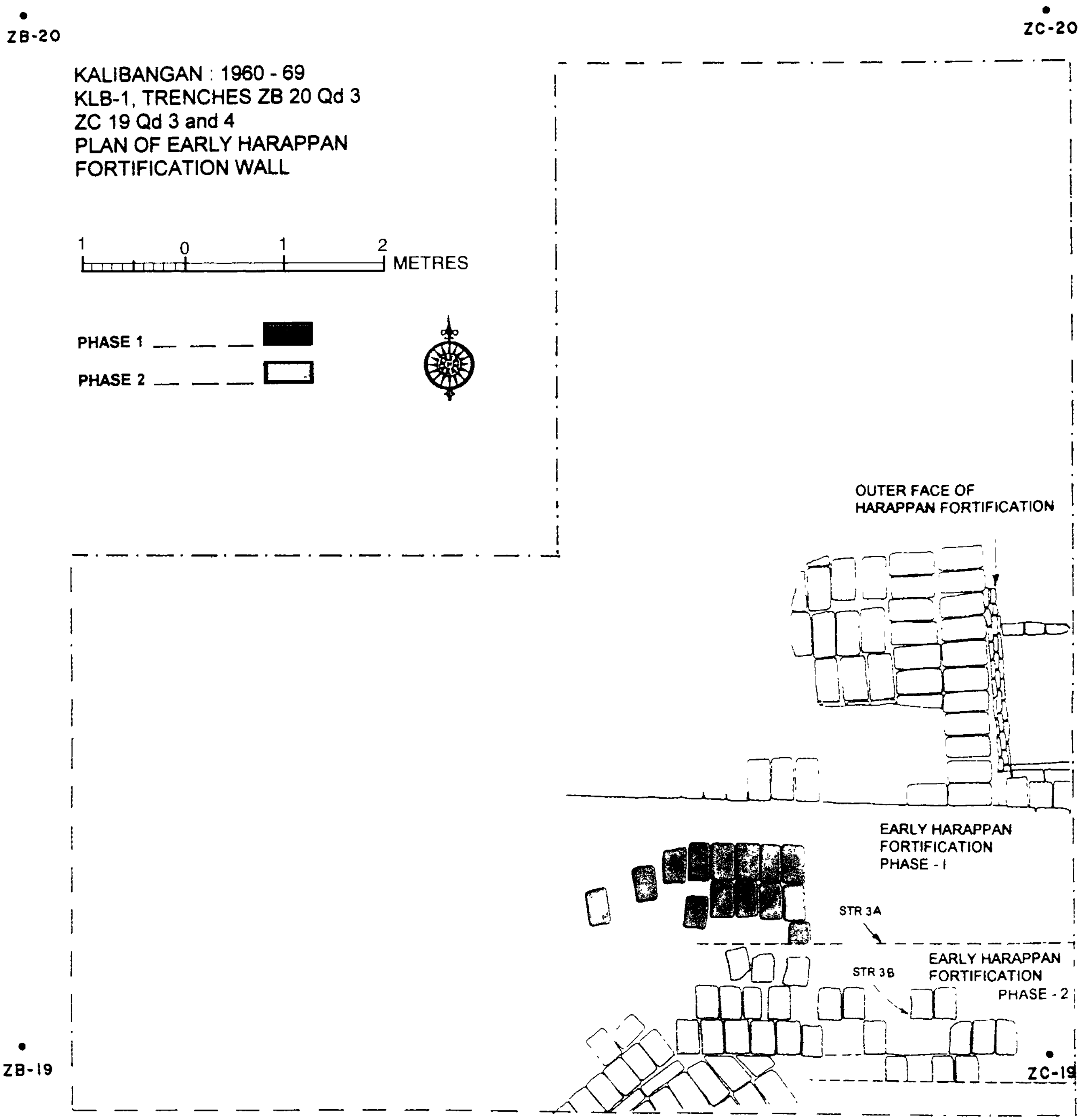

ZB-20
ZC-20
KALIBANGAN : 1960 - 69
KLB-1, TRENCHES ZB 20 Qd 3
ZC 19 Qd 3 and 4
PLAN OF EARLY HARAPPAN
FORTIFICATION WALL
1 0 1 2 METRES
PHASE 1
PHASE 2
OUTER FACE OF
HARAPPAN FORTIFICATION
EARLY HARAPPAN
FORTIFICATION
PHASE - I
STR 3A
STR 3B
EARLY HARAPPAN
FORTIFICATION
PHASE - 2
ZB-19
ZC-19

Fig. 13

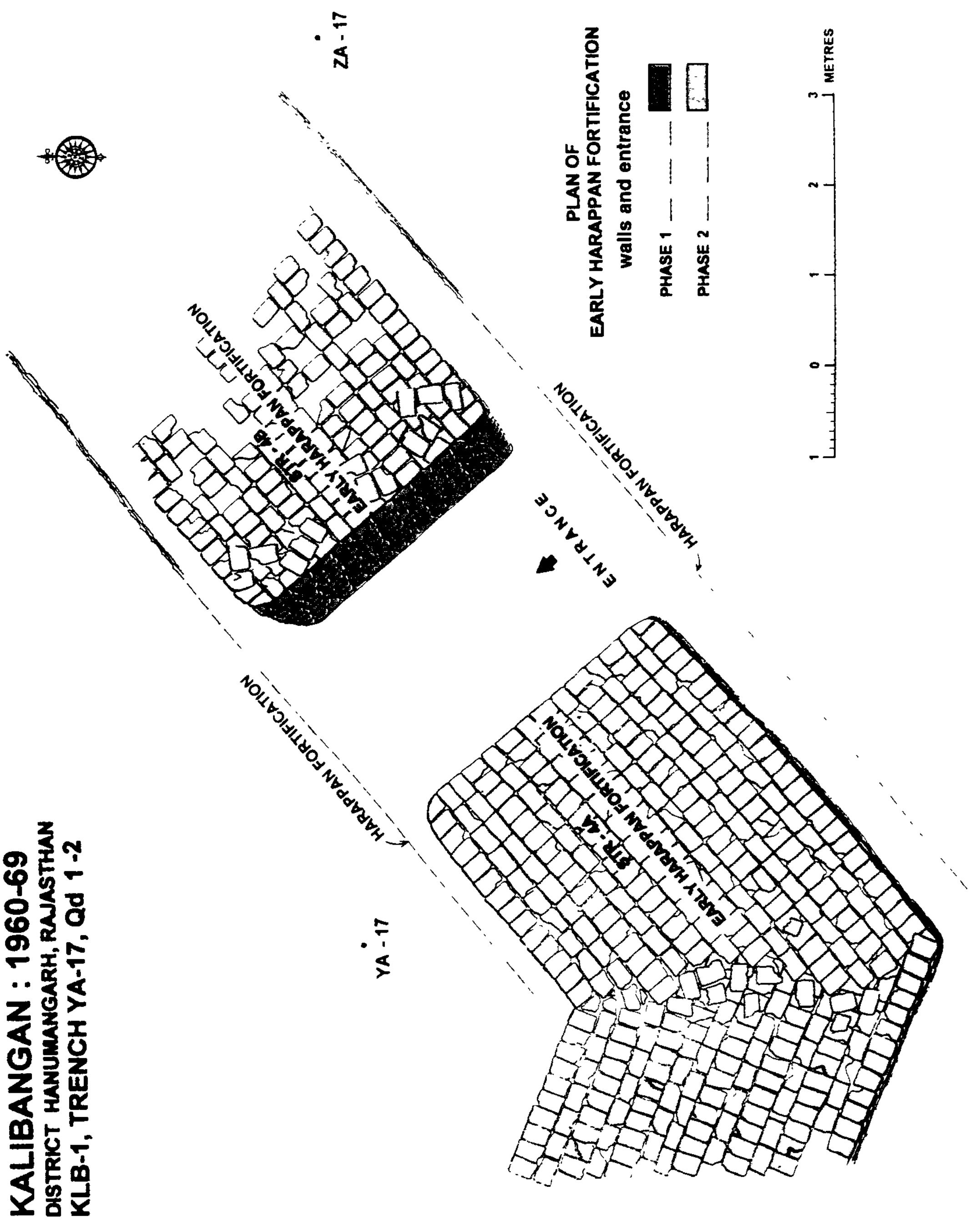

KALIBANGAN : 1960-69
DISTRICT HANUMANGARH, RAJASTHAN
KLB-1, TRENCH YA-17, Qd 1-2
YA-17
ZA-17
HARAPPAN FORTIFICATION
EARLY HARAPPAN FORTIFICATION
STR-4A
HARAPPAN FORTIFICATION
EARLY HARAPPAN FORTIFICATION
STR-4B
ENTRANCE
PLAN OF
EARLY HARAPPAN FORTIFICATION
walls and entrance
PHASE 1
PHASE 2
1 0 1 2 3 METRES

Fig. 14

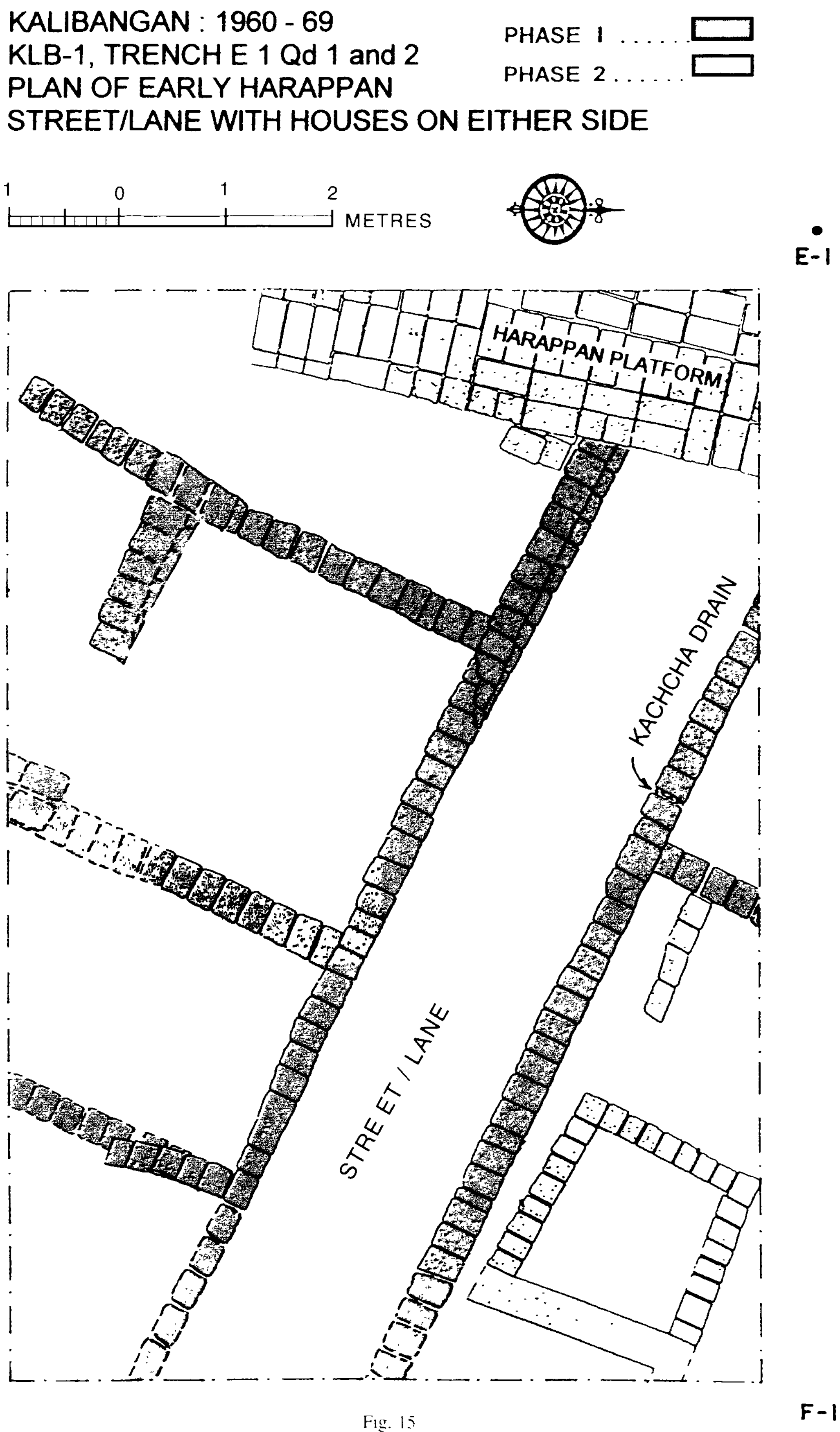

KALIBANGAN : 1960 - 69
KLB-1, TRENCH E 1 Qd 1 and 2
PLAN OF EARLY HARAPPAN
STREET/LANE WITH HOUSES ON EITHER SIDE
PHASE 1 ......
PHASE 2 ......
1 0 1 2 METRES
E-1
HARAPPAN PLATFORM
KACHCHA DRAIN
STRE ET / LANE
F-1

Fig. 15



Pl. XVI *KLB-1 : street.* *See p. 54*

10. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
11. Any other details regarding bricks and state of preservation and shape and other distinguishing feature : Bricks are eroded.

13. STRUCTURE NO. EH-9

1. Location : Square no. E1, Quadrant no. 2
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (4) and (1), (2) and (3) are contemporary layers.
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 1.8 m (b) width 0.30 m (c) height 0.10 m
6. Number of courses : One
7. Masonry and bond : header
8. Orientation of longer axis : north-south
9. Nature of bricks used : Mud-bricks
10. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
11. Any other details regarding bricks and state of preservation and shape and other distinguishing feature : Bricks are eroded.

14. STRUCTURE NO.EH-10

1. Location : Square no. E1, Quadrant no. 2
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (4) and layers (1), (2), (3) are contemporary
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 1m (b) width 0.30 m (c) height 0.10 m
6. Number of courses : One
7. Masonry and bond : header
8. Orientation of longer axis : north-south
9. Nature of bricks used : Mud-bricks
10. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
11. Any other details regarding bricks and state of preservation and shape and other distinguishing feature : Bricks are eroded.

15. STRUCTURE NO.EH-11 (A) (B) (C) (D)

1. Location : Square no. E1, Quadrant no. 2
2. Type of structure : Three walls of a room
3. Stratigraphic position : It is built on layer (3), (1) and (2) are contemporary layers.
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure :
   11 A (a) length 1.50 m (b) width 30 cm (c) height 10 cm,
   11 B (a) length 1.65 m (b) width 30 cm (c) height 10 cm,
   11 C (a) length 1.65 m (b) width 30 cm (c) height 10 cm, 11 D disintegrated
6. Number of courses : One
7. Masonry and bond : header
8. Orientation of longer axis : 11 A east-west, 11 B north-south, 11 C east-west and 11 D north-south
9. Nature of bricks used : Mud-bricks
10. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
11. Any other details regarding bricks and state of preservation and shape and other distinguishing feature : Eroded

16. STRUCTURE NO. EH-12

1. Location : Square no. E1, Quadrant no. 1
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (3N) and layer (2N) and (3N) are contemporary
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 1 m (b) width 30 cm (c) height 10 cm
6. Number of courses : One course
7. Masonry and bond : header
8. Orientation of longer axis : north-south
9. Nature of bricks used : Mud-bricks
10. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm

11. Any other details regarding bricks and state of preservation and shape and other distinguishing feature : Bricks are eroded.

17. STRUCTURE NO. EH-13

1. Location : Square no. E1, Quadrant no. 1
2. Type of structure : Wall
3. Period and structural phase : Period I, Early Harappan, phase 2
4. Measurement of structure : (a) length 1.10 m (b) width 0.30 m (c) height 0.10 m
5. Number of courses : One
6. Masonry and bond : header and stretchers
7. Orientation of longer axis : east-west
8. Nature of bricks used : Mud-bricks
9. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
10. Any other details regarding bricks and state of preservation and shape and other distinguishing feature : Bricks fragile and eroded

18. STRUCTURE NO. EH-14

1. Location : Square no. E1, Quadrant no. 3
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (4A); layers (4), (3) and (2) are contemporary layers.
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 1.40 m (b) width 30 cm (c) height 10cm
6. Number of courses : One
7. Masonry and bond : header
8. Orientation of longer axis : east-west
9. Nature of bricks used : Mud-bricks
10. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
11. Any other details regarding bricks and state of preservation and shape and other distinguishing feature : Bricks are eroded.

19. STRUCTURE NO. EH-14A

1. Location : Square no. E1, Quadrant no. 1
2. Type of structure : *Kachacha* Drain
3. Stratigraphic position : Built on layer (4), contemporary layer (3) and sealed by layer (2)
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 0.25 m (b) width 0.20 m
6. Orientation of longer axis : north-south
7. Any other details regarding bricks and state of preservation and shape and other distinguishing feature : Drain gap.

20. STRUCTURE NO. EH-15

1. Location : Square no. YF1, Quadrant no. 1
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (3) and sealed by layer (1)
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure : (a) length 4.25 m (b) width 0.74 m (not fully available) (c) height 0.30 m
6. Number of courses : three courses
7. Masonry and bond : headers and stretchers
8. Composition of plaster : Clay plaster
9. Orientation of longer axis : north-east to south-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm.
12. Any other details regarding bricks and state of preservation : Upper course disintegrated due to water action.

21. STRUCTURE NO. EH-16&17

1. Location : Square no. YF1, Quadrant no. 1 and 4
2. Type of structure : Platform
3. Stratigraphic position : Built on layer (4) and sealed by layer (1)
4. Period and structural phase : Period I, Early Harappan, phase 4
5. Measurement of structure : (a) length

3.15 m (b) width 1.76 m (c) height 0.49 m

6. Number of courses : five courses
7. Masonry and bond : header and stretchers
8. Composition of plaster : Clay plaster
9. Orientation of longer axis : north-east to south-west.
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. Any other details regarding bricks and state of preservation : Upper course washed by water.

22. STRUCTURE NO. EH-18

1. Location : Square no. YF1, Quadrant no. 1
2. Type of structure : Platform
3. Stratigraphic position : Built on layer (3) sealed by layer (2)
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure : (a)length 1.80 m (b) width 0.72 m(c) height 0.20 m
6. Number of courses : two courses
7. Masonry and bond : Stretchers
8. Composition of plaster : Clay plaster
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 6 cm
12. Any other details regarding bricks and state of preservation and shape and other distinguishing feature : Washed away by water action of the raingulley.

23. STRUCTURE NO. EH-18A

1. Location : Square no. YF 1, Quadrant no. 1
2. Type of structure : Platform
3. Stratigraphic position : Built over layer (2) and sealed by layer (1)
4. Period and structural phase : Period I, Early Harappan, phase 4
5. Measurement of structure : (a) length 3.25 m (b) width 2.00 m (c) height 0.20 m
6. Number of courses : one course
7. Masonry and bond : headers and stretchers
8. Composition of plaster/mortar : Brownish earth with grit and charcoal
9. Nature of bricks used : Mud-bricks
10. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
11. Any other details regarding bricks and state of preservation and shape and other distinguishing feature : Slightly preserved.

24. STRUCTURE NO. EH-19

1. Location : Square no. YF-1, Quadrant no. 1 and 4
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (6) and sealed by layer (4)
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 2 m (b) width 0.66 m (c) height 0.40 m
6. Number of courses : two courses
7. Masonry and bond : headers and stretchers
8. Composition of plaster : Clay plaster
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 21 cm (c) thickness 9 cm; (a) length 30 cm (b) breadth 22 cm (c) thickness 10 cm
12. Any other details regarding bricks and state of preservation and shape and other distinguishing feature : Bricks intact.

25. STRUCTURE NO. EH-20

1. Location : Square no. YF1
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (6) and sealed by layer (4)
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure : (a) length

2.40 m (b) width 0.20 m (c) height 0.20 m
6. Number of courses : two courses
7. Masonry and bond : Stretchers
8. Composition of mortar : Earth with charcoal
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. State of preservation : Damaged in the northern side.

26. STRUCTURE NO. EH-21

1. Location : Square no. YF1, Quadrant nos. 1 and 4
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (7) and sealed by layer (4)
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 3.48 m (b) width 0.30 m (c) height 0.40 m
6. Number of courses : two courses
7. Masonry and bond : headers
8. Composition of plaster : Clay
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm ; (a) length 29 cm (b) breadth 22 cm (c) thickness 9 cm
12. Any other details regarding bricks and state of preservation and shape and other distinguishing feature : Forms a part of pot enclosure walls.

27. STRUCTURE NO. EH-22

1. Location : Square no. YF1, Quadrant nos. 1 and 4
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (7) and sealed by layer (4).
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 1.62 m (b) width 0.30 m (c) height 0.17 m
6. Number of courses : two courses
7. Masonry and bond : header and stretchers
8. Composition of plaster : Clay plaster
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 31 cm (b) breadth 24 cm (c) thickness 10 cm
12. Any other details regarding bricks and state of preservation and shape and other distinguishing feature : Forms a part of the enclosure wall.

28. STRUCTURE NO. EH-23

1. Location : Square no. YF1, Quadrant nos. 1 and 4
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (6) and sealed by layer (4)
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 2 m (b) width 0.60 m (c) height 0.15 m
6. Number of courses : two courses
7. Masonry and bond : headers and stretchers
8. Composition of plaster : Clay plaster
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm ; (a) length 30 cm (b) breadth 20 cm (c) thickness 5 cm

29. STRUCTURE NO. EH-24

1. Location : Square no. YF1, Quadrant nos. 1 and 4
2. Type of structure : Wall
3. Stratigraphic position : Built on natural soil and sealed by layer (7).
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 1.58 m (b) width 20 m (c) height 0.15 m
6. Number of courses : One course
7. Masonry and bond : Stretchers
8. Composition of plaster : Clay plaster

9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 30 cm (c) thickness 9 cm
12. Any other details regarding bricks and state of preservation and shape and other distinguishing feature : Disintegrated by water action.

30. STRUCTURE NO. EH-25

1. Location : Square no. YF1, Quadrant nos. 1 and 4
2. Type of structure : Oven
3. Stratigraphic position : Built on Natural soil and sealed by layer (6), Contemporary layers (7)
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) diameter 0.50 m (b) thickness 0.5 m (c) height 0.16 m
6. Masonry and bond : Round shaped
7. Orientation of longer axis : Round
8. Nature of bricks used : Burnt-clay
9. Dimensions : thickness 50 cm in diameter

31. STRUCTURE NO. EH-26

1. Location : Square no. YE1, Qd 4
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (4)
4. Period and structural phase : Period I, Early Harappan, phase 3
5. Measurement of structure : (a) length 2 m (b) width 0.64 m (c) height 0.10 m
6. Number of courses : two courses
7. Masonry and bond : headers and stretchers
8. Composition of plaster : Brownish earth with grit and pottery
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. State of preservation : Bricks are not well preserved
13. Shape and other distinguishing feature : Thick mortar lines.

32. STRUCTURE NO. EH-27

1. Location : Square no. YE1, Quadrant no. 4
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (5), sealed by layer (3) and contemporary layer is (4)
4. Period and structural phase : Period I, Early Harappan, phase 3
5. Measurement of structure : (a) length 2.60 m (b) width 0.30 m (c) height 0.20 m
6. Number of courses : two courses
7. Masonry and bond : headers
8. Composition of plaster : Clay with charcoal pieces
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. State of preservation : The bricks are not much eroded.

33. STRUCTURE NO. EH-28

1. Location : Square no. YE1, Quadrant no. 4
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (3), sealed by layer (2)
4. Period and structural phase : Period I, Early Harappan, phase 3
5. Measurement of structure : (a) length 3.30 m (b) width 0.50 m (c) height 0.10 m
6. Number of courses : Single
7. Masonry and bond : headers
8. Composition of mortar : Brownish earth with grit
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other

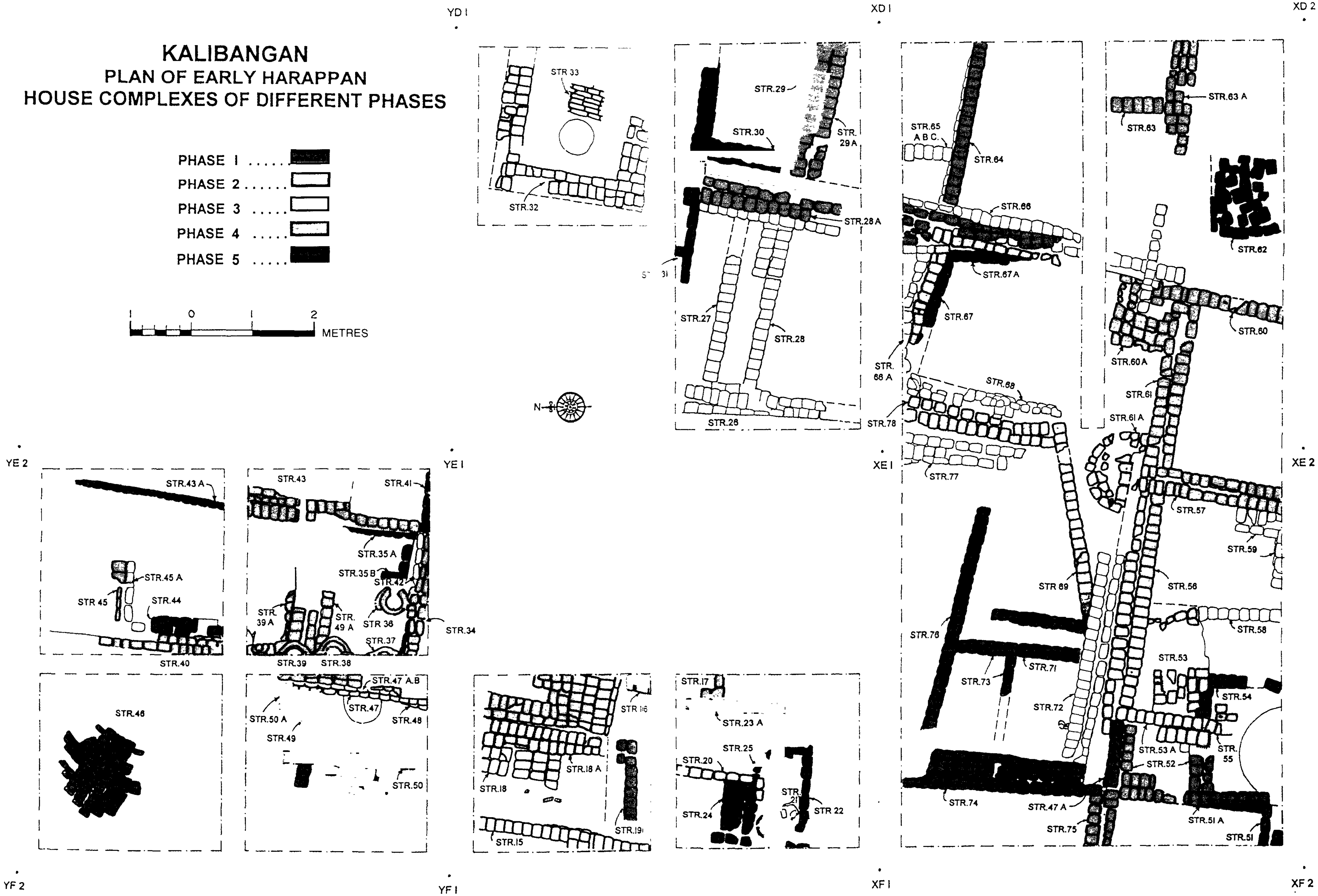

KALIBANGAN
PLAN OF EARLY HARAPPAN
HOUSE COMPLEXES OF DIFFERENT PHASES
PHASE 1
PHASE 2
PHASE 3
PHASE 4
PHASE 5
0
2
METRES
N
YD I
XD I
XD 2
YE 2
YE I
XE I
XE 2
YF 2
YF I
XF I
XF 2
STR 33
STR.32
STR.29
STR.30
STR. 29 A
STR.28 A
STR.27
STR.28
STR.26
STR.65 A B C.
STR.64
STR.63 A
STR.63
STR.62
STR.66
STR.67 A
STR.67
STR. 66 A
STR.68
STR.78
STR.77
STR.60
STR.60 A
STR.61
STR.61 A
STR.57
STR.59
STR.56
STR.58
STR.53
STR.54
STR. 55
STR.53 A
STR.52
STR.51 A
STR.51
STR.69
STR.76
STR.73
STR.71
STR.72
STR.74
STR.47 A
STR.75
STR.43 A
STR.45 A
STR 45
STR.44
STR.40
STR.43
STR.41
STR.35 A
STR.35 B
STR.42
STR. 39 A
STR. 49 A
STR 36
STR.37
STR.34
STR.39
STR.38
STR.46
STR.47 A.B
STR.47
STR.48
STR.50 A
STR.49
STR.50
STR.18
STR.18 A
STR.19
STR.15
STR.17
STR.23 A
STR.25
STR.20
STR.24
STR 22

Fig 16

distinguishing feature : The bricks are damaged in the western corner.

12. State of preservation : Not in good condition.

34. STRUCTURE NO. EH-29

1. Location : Square no. YE1, Quadrant no. 2
2. Type of structure : Wall
3. Stratigraphic position : Built on Natural soil, sealed by layer (4E), layers (8E) to (5E) are contemporary deposits
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 2.40 m (b) width 0.20 m (c) height 0.20 m
6. Number of courses : two courses
7. Masonry and bond : headers and stretchers
8. Composition of mortar : Grayish earth with grit
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. State of preservation : Not found in good condition.

35. STRUCTURE NO. EH-29A

1. Location : Square no. YE1, Quadrant no. 2
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (4E) sealed by layer (2) and layer (3F) is contemporary deposits
4. Period and structural phase : Period I, Early Harappan, phase 4
5. Measurement of structure : (a)length 2.20 m (b)width 0.55 m (c) height 0.20 m
6. Number of courses : two courses
7. Masonry and bond : headers and stretchers
8. Composition of mortar : Grayish earth with grit
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm

36. STRUCTURE NO. EH-30

1. Location : Square no. YE1, Quadrant no. 3
2. Type of structure : Wall
3. Stratigraphic position : Built on Natural soil sealed by layer (4E), Layers (8E) to (5E) are contemporary deposits
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 1.20 m (b) width 0.30 m (c) height 0.20 m
6. Number of courses : two courses
7. Masonry and bond : headers
8. Composition of mortar : Grayish earth
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. State of preservation : Bricks are damaged.

37. STRUCTURE NO. EH-31

1. Location : Square no. YE1, Quadrant no. 3
2. Type of structure : Wall
3. Stratigraphic position : Built on Natural soil and sealed by layer (4E), layers (8E) - (5E) are contemporary layers.
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 1.60 m (b) width 0.30 m (c) height 1 m
6. Number of courses : ten courses
7. Masonry and bond : headers and stretchers
8. Composition of mortar : Loose ashy clay
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. State of preservation : The bricks are damaged.

38. STRUCTURE NO. EH-32

1. Location : Square no. YE1, Quadrant no. 2
2. Type of structure : Room with three walls and a floor of bricks edge
3. Stratigraphic position : Built on layer (4), sealed by layer (3)
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure : (a) length 2.60 m (b) width 0.45 m (c) height 0.20 m
6. Number of courses : two courses
7. Masonry and bond : headers and stretchers
8. Composition of mortar : Grayish earth with grit
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. State of preservation : Bricks are not well preserved.

39. STRUCTURE NO. EH-33

1. Location : Square no. YE1, Quadrant no. 2
2. Type of structure : Platform made of brick on edge 1 m x.1 m
3. Stratigraphic position : Built on layer (4), sealed by layer (3)
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure : (a) length 0.45 m (b) width 0.45 m (c) height 0.10 m
6. Number of courses : One
7. Masonry and bond : Brick on edge
8. Composition of mortar : Grayish earth
9. Orientation of longer axis : north-south
10. Nature of bricks used : Burnt bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : It is in the centre not fully available. In front of the platform there appears to be a pit cut in to layer (4) and sealed by layer (3).

40. STRUCTURE NO. EH-34

1. Location : Square no. YF2, Quadrant no. 3
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (6); contemporary layers (5) and (4) and sealed by layer (1)
4. Period and structural phase : Period I, Early Harappan, phases 3 and 4
5. Measurement of structure : (a) length 3.47 m (b) width 0.52 m (c) height 1.03 m
6. Number of courses : ten courses
7. Masonry and bond : headers and stretchers, alternate courses of headers and stretchers
8. Composition of plaster : Thick clay
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Slightly damaged with cavities.

41. STRUCTURE NO. EH-35

1. Location : Square no. YF2, Quadrant no. 3
2. Type of structure : Wall
3. Stratigraphic position : Built on the Natural soil sealed by layer (8)
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 0.62 m (b) width 0.22 m (c) height 0.10 m
6. Number of courses : one course
7. Masonry and bond : headers
8. Composition of plaster : Nil
9. Orientation of longer axis : east-west and turns to north
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 22 cm. (c) thickness 10 cm
12. Any other details regarding bricks and

state of preservation and shape and other distinguishing feature : Found in damaged state.

42. STRUCTURE NO. EH-35A

1. Location : Square no. YF2, Quadrant no. 3
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (8), layer (6) & (7) are contemporary it is sealed by layer (5A)
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 1.20 m (b) width 0.20 m (c) height 0.30 m
6. Number of courses : three courses
7. Masonry and bond : English bond
8. Composition of plaster/mortar : Thick clay of plaster, mortar is clay with charcoal
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. State of preservation : Badly damaged

43. STRUCTURE NO.EH-35B

1. Location : Square No.YF2, Quadrant No.3
2. Type of structure : Room
3. Stratigraphic position : Built on the Natural soil
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length m (b) width m (c) height m
6. Number of courses : one course
7. Masonry and bond : English bond, thick clay
8. Orientation of longer axis : north-south, east-west
9. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
10. Any other details regarding bricks and state of preservation and shape and other distinguishing feature : It seems to be part of a room

44. STRUCTURE NO.EH-36

1. Location : Square No.YF2, Quadrant No.3
2. Type of structure : Tandoor
3. Stratigraphic position : Built on the top of layer (3), layer (2) is contemporary deposit; layer (3X) (ash) is also contemporary layer (1A) sealed the oven; working level is on top of layer (3).
4. Period and structural phase : Period I, Early Harappan, phase 4
5. Measurement of structure : (a) Outer diameter 0.71 m (b) Inner diameter 0.30 m (c) height 0.21 m
6. Masonry and bond : Made of fine clay mixed with husk and probably cow-dung
7. Orientation of longer axis : Found at a distance of 0.94 m from the section looking west and by the side of STR-34
8. Dimension : thickness 20 cm
9. Any other details regarding bricks and state of preservation and shape and other distinguishing feature : It seems that it was an over-ground structure.

45. STRUCTURE NO.EH-37

1. Location : Square no. YF2, Quadrant no. 3
2. Type of structure : Tandoor
3. Stratigraphic position : Built on the top of layer (3), contemporary layer is (2) and sealed by layer (1A)
4. Period and structural phase : Period I, Early Harappan phase 4
5. Measurement of structure : (a) Outer diameter 0.50 m (b) Inner diameter 0.20 m (c) height 0.35 m
6. Composition of plaster : Made of fine clay
7. Orientation of longer axis : Found in the southeastern corner
8. Dimension : thickness of the tandoor-0.05 m

46. STRUCTURE NO. EH-38

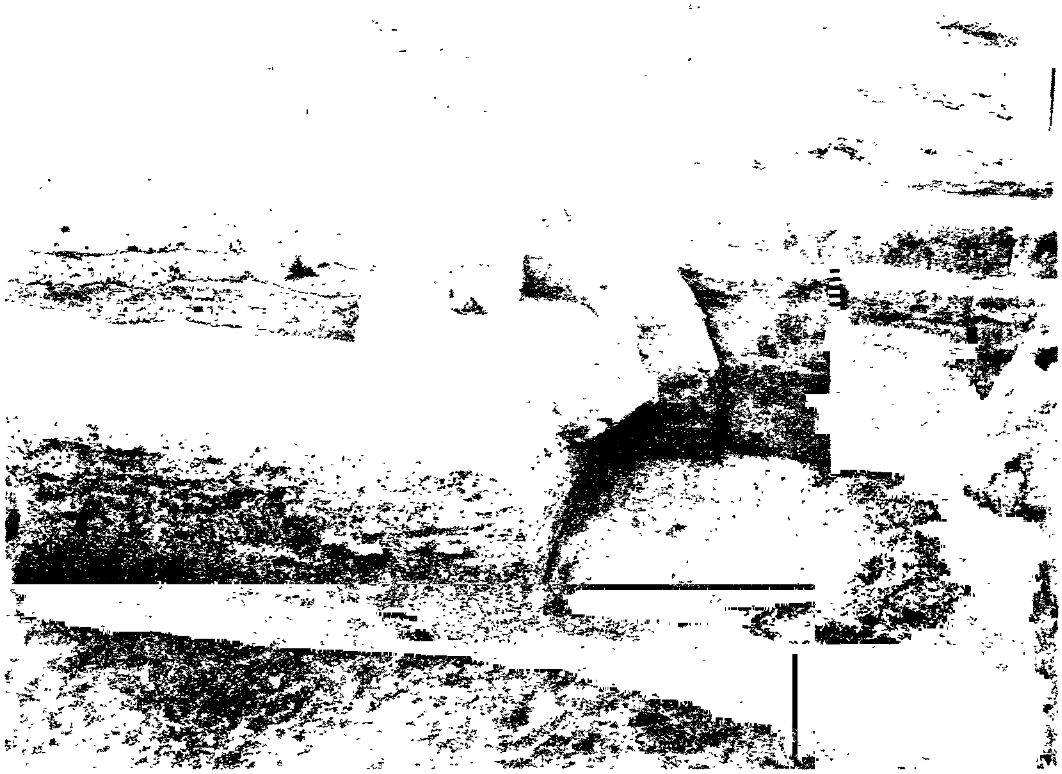
1. Location : Square no. YF2, Quadrant no. 3



Pl. XVII *KLB-1* . tandoors See p 53



Pl XVIII *KLB-1* close up view of tandoor See p 53



Pl. XIX *KLB-1 . tandoor.* *See p. 53*



Pl. XX *KLB-1 · section, tandoor (underground).* *See p. 53*

2. Type of structure : Tandoor
3. Stratigraphic position : Out in to layers (5) working level top of layer (5) sealed by layer (2A)
4. Period and structural phase : Period I, Early Harappan, phase 4
5. Measurement of structure : Outer diameter 0.75 m, inner diameter 0.40 m
6. Composition of plaster : Made of clay which has been burnt
7. Orientation of longer axis : Found in the section looking west
8. Dimensions : thickness of tandoor 0.10 m
9. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Inside the Tandoor there is a 0.35 m thick deposit of whitish ash.

47. STRUCTURE NO. EH-39

1. Location : Square no. YF2, Quadrant no. 3
2. Type of structure : Tandoor
3. Stratigraphic position : Built in to layer (5), working level top of layer (5) sealed by layer (2A)
4. Period and structural phase : Period I, Early Harappan, phase 4
5. Measurement of structure : Outer diameter 0.65 m; inner diameter 0.30m
6. Composition of plaster : Made of clay which has been burnt
7. Orientation of longer axis : Found in the section looking west
8. Dimension : thickness of tandoor 0.8m
9. Any other details regarding bricks and state of preservation and shape and other distinguishing feature : Inside the tandoor there is 0.34 thick deposit of ash.

48. STRUCTURE NO. EH-39A

1. Location : Square no. YF2, Quadrant no. 3 & 4
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (5), sealed by layer (1)
4. Period and structural phase : Period I, Early Harappan, phase 4
5. Measurement of structure : (a) length 1.40m (b) width 0.40m (c) height 0.36m
6. Number of courses : three courses
7. Masonry and bond : headers and stretchers
8. Composition of plaster/mortar : Hard clayey plaster and mortar made of clay and brownish earth
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. State of preservation : Not good

49. STRUCTURE NO. EH-40

1. Location : Square no. YF2, Quadrant no. 2
2. Type of structure : Portion of a wall with a Tandoor at its end.
3. Stratigraphic position : Built on the top layer (4)
4. Period and structural phase : Period I, Early Harappan, phase 4
5. Measurement of structure : (a) length 1.95 m (b) width 0.30 m (c) height 0.21 m
6. Number of courses : two courses
7. Masonry and bond : headers, bond is not clear
8. Composition of plaster : Two layers of plaster-inner greenish outer brownish
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 0.33 m (b) breadth 0.22 m (c) thickness 0.10 m
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Badly damaged and the debris material of STR 5A also overlying it.

50. STRUCTURE NO. EH-41

1. Location : Square no. YF2, Quadrant no. 3

2. Type of structure : Wall
3. Stratigraphic position : Built on layer (7), layer (6) is contemporary and sealed by layer (5A)
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 1 m (b) width 0.25 m (c) height 0.24 m
6. Number of courses : three courses
7. Masonry and bond : headers and stretchers
8. Composition of plaster : Thick clayey plaster
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. Shape and other distinguishing feature: Structure is badly damaged by pits sealed by layer (5A) and cut into layer (6)

51. STRUCTURE NO. EH-42

1. Location : Square no. YF2, Quadrant no. 3
2. Type of structure : Wall
3. Stratigraphic position : Built on the top of layer (6), layers (5), (5A) and (4) are contemporary and sealed by layer (3)
4. Period and structural phase : Period I, Early Harappan, phase 3 and 4
5. Measurement of structure : (a) length 1.20 m (b) width 0.30 m (c) height 1.02 m
6. Number of courses : nine courses
7. Masonry and bond : headers and stretchers
8. Composition of plaster : Thick clay plaster
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. Any other details regarding bricks and state of preservation : Well preserved brown coloured bricks made of clay.

52. STRUCTURE NO. EH-43

1. Location : Square no. YF2, Quadrant no. 3
2. Type of structure : Platform/wall
3. Stratigraphic position : Built on tne top of the layer (5). contemporary layer (4) and sealed by layer (2)
4. Period and structural phase : Period I, Early Harappan, phase 4
5. Measurement of structure : (a) length 2.80 m (b) width 0.60 m (c) height 0.60 m
6. Number of courses : five courses
7. Masonry and bond : headers, English bond
8. Composition of plaster : Hard clay of plaster
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 32 cm (b) breadth 20 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Upper courses of bricks badly damaged.

53. STRUCTURE NO. EH-43A

1. Location : Square no. YF2, Quadrant no. 3
2. Type of structure : Platform/wall
3. Stratigraphic position : Built on the top of the layer (5), contemporary to layer (4) and sealed by layer (2)
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 3.50 m (b) width 0.20m (c) height 0.60m
6. Number of courses : Three to five courses
7. Masonry and bond : headers
8. Composition of plaster : Hard clayey plaster
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 32 cm (b) breadth 20 cm (c) thickness 10 cm

12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Upper courses of bricks badly damaged.

54. STRUCTURE NO. EH-44

1. Location : Square no. YF2, quadrant no. 2
2. Type of structure : Wall
3. Stratigraphic position : Built on the top of Natural soil, layer (4) is contemporary and sealed by layer (2A)
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 1.63 m (b) width 0.40 m, 0.33 m (c) height 0.80 m
6. Number of courses :eight courses
7. Masonry and bond : Alternate courses of headers and stretchers
8. Composition of plaster : Greenish and brownish sticky plaster
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 35 cm (b) breadth 22cm (c) thickness 11cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Hard brownish clay has been used in the bricks which are in fine preservation.

55. STRUCTURE NO. EH-45

1. Location : Square no. YF2, Quadrant No.2
2. Type of structure : Wall
3. Stratigraphic position : This wall has two phases in the earlier phase the wall has a foundation trench cut into layer (3) In the later phase this wall has been made on the top of layer (2Z), layer (2) is the contemporary deposit of the later phase
4. Period and structural phase : Period I, Early Harappan, phases 3 & 4
5. Measurement of structure : (a) length 1.30 m (b) width 0.30 m (c) height 0.10 m
6. Number of courses : ten courses
7. Masonry and bond : headers and stretchers, English bond
8. Composition of mortar : Greenish clay mixed with sand and ash having a thick clayey brownish plaster.
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Damaged face of the wall is available. Bricks are made of brownish clay.

56. STRUCTURE NO. EH-45A

1. Location : Square no. YF2, Quadrant no. 4
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (3A), sealed by layer (1)
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure : (a) length 3.65 m (b) width not available (c) height 1.20 m
6. Number of courses : ten courses
7. Masonry and bond : headers
8. Composition of mortar : Grayish earth
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30cm (b) breadth 20cm (c) thickness 10cm
12. State of preservation : Preserved

57. STRUCTURE NO. EH-46

1. Location : Square no. YF2, Quadrant no. 1
2. Type of structure : Semi-circular structure
3. Stratigraphic position : Available in the surface
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : diameter 3.15 m

6. Masonry and bond : Stretchers only one course on the plan is available
7. Orientation of longer axis : north-south
8. Nature of bricks used : Mud-bricks
9. Dimension of bricks : (a) length 30 cm (b) breadth 15 cm
10. Any other details regarding bricks and state of preservation : Body disintegrated

58. STRUCTURE NO. EH-47 A AND B

1. Location : Square no. YF2, Quadrant no. 4
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (6), and sealed by layer (5)
4. Period and structural phase : Period I, Early Harappan, phase 3
5. Measurement of structure : (a) length 2.95 m (b) width 0.30 m (c) height 0.92 m
6. Number of courses : nine courses
7. Masonry and bond : headers and Stretchers, English bond
8. Composition of plaster : Clay mixed with charcoal
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Bricks are well preserved.

59. STRUCTURE NO. EH-48

1. Location : Square no. YF2, Quadrant no. 5
2. Type of structure : Wall
3. Stratigraphic position : Built on the top of layer (8), sealed by layer (6)
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure : (a) length 3.50 m (b) width 0.68 m (c) height 1.10 m
6. Number of courses : ten courses
7. Masonry and bond : headers and stretchers, English bond
8. Composition of plaster : Thick clayey brownish plaster
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Damaged face of the wall is available, bricks are made of hard brownish clay.

60. STRUCTURE NO. EH-49

1. Location : Square no. YF2, Quadrant no. 4
2. Type of structure : Wall
3. Stratigraphic position : Built on the top of layer (7) over sides structure 49 sealed by layer (5), contemporary layer is (7)
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 3.30 m (b) width 0.30 m (c) height 0.80 m
6. Number of courses :eight courses
7. Masonry and bond : headers, English bond
8. Composition of plaster : Hard clayey plaster
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Well laid and well preserved bricks made of hard slightly brownish clay with gravel.

61. STRUCTURE NO. EH-50-50A

1. Location : Square no. YF2, Quadrant no. 4
2. Type of structure : Wall
3. Stratigraphic position : Built on the top of Natural soil sealed by (7)

contemporary layer (8)

4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 3.42m (b) width 0.30m (c) height 0.25m
6. Number of courses : two courses
7. Masonry and bond : headers and stretchers, English bond
8. Composition of mortar : Clay mixed with ash clay plaster
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 21 cm (c) thickness 10 cm; (a) length 28 cm (b) breadth 20 cm (c) thickness 10 cm
12. State of preservation : Damaged
13. Shape and other distinguishing feature : Layer 49 A is a part of floor.

62. STRUCTURE NO. EH-51 AND 51A

1. Location : Square no. XF1, Quadrant no. 4
2. Type of structure : Wall
3. Stratigraphic position : Built on the top-not fully exposed
4. Period and structural phase : Period I, Early Harappan, phase 4
5. Measurement of structure : STR-51 (a) length 1.00 m (b) width 0.57 m (c) height 0.28 m STR 51A (a) length 1.50m (b) width 0.56 m (c) height 0.28 m
6. Number of courses : three courses
7. Orientation of structure : east-west, Nourth-south
8. Composition of plaster : nil
9. Orientation of longer axis : STR 51 east-west, STR 51A-1 m north-south.
10. Dimension of bricks : (a) STR 51 length 1.50 m (b) width 0.22 m (c) thickness 0.10 m
11. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Badly damaged

63. STRUCTURE NO. EH-52

1. Location : Square no. XF1, Qd4
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (4), contemporary layer (3) and (2A) sealed by layer (1)
4. Period and structural phase : Period I, Early Harappan, phase 4
5. Measurement of structure : (a) length 2.70 m (b) width 1.65 m (c) height 0.55 m
6. Number of courses : three in the southern side
7. Masonry and bond : headers and stretches, English bond
8. Composition of plaster : nil
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud brick
11. Dimension of bricks : (a) length 10 cm (b) breadth 20 cm (c) thickness 30 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Damaged

64. STRUCTURE NO. EH-53

1. Location : Square no. XF1, Quadrant no. KLB-1
2. Type of structure : Platform
3. Stratigraphic position : Built on layer (4), contemporary layer (3) and sealed by layer (1)
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure : (a) length 1.70 m (b) width 1.35 m (c) height 0.35 m
6. Number of courses : three courses in the southern side
7. Masonry and bond : headers stretchers - English bond
8. Composition of plaster : nil
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud brick
11. Dimension of bricks : (a) length 32 cm (b) breadth 24 cm (c) thickness 9 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Damaged

65. STRUCTURE NO. EH-53A

1. Location : Square no. XF1, Quadrant no. KLB-1
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (4), contemporary layer (3) and (2A), sealed by layer (2)
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure : (a) length 1.75 m (b) width 0.48 m (c) height 0.40 m
6. Number of courses : four courses
7. Masonry and bond : Longest course headers, middle two stretchers, upper one header, English bond.
8. Composition of plaster : nil
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud brick
11. Dimension of bricks : (a) length 33cm (b) breadth 24 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Damaged bricks.

66. STRUCTURE NO. EH-54

1. Location : Square no. XF1, Quadrant No.KLB-1
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (6), contemporary layer (5) and sealed by layer (4)
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 30 m (b) width 0.20 m (c) height 30 m
6. Number of courses : three courses
7. Masonry and bond : headers, English bond
8. Composition of plaster : nil
9. Orientation of longer axis : north-south and east-west
10. Nature of bricks used : Mud brick
11. Dimension of bricks : (a) length 34cm (b) breadth 24 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Good condition.

67. STRUCTURE NO. EH-55 (PART OF 53A)

1. Location : Square no. XF1, Quadrant no. KLB-1
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (4) sealed by (1)
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure : (a) length 2.40 m (b) width 0.35 m (c) height 0.20 m
6. Number of courses : Two courses
7. Masonry and bond : headers
8. Composition of plaster : nil
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud brick
11. Dimension of bricks : (a) length 32 cm (b) breadth 23 cm (c) thickness 9 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Damaged.

68. STRUCTURE NO. EH-55

1. Location : Square no. XF1, Quadrant no. KLB-1
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (4), sealed by layer (1)
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure : (a) length 2.40 m (b) width 0.35 m (c) height 0.20 m
6. Number of courses : Two courses
7. Masonry and bond : headers
8. Composition of plaster : nil
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud brick
11. Dimension of bricks : (a) length 32 cm (b) breadth 23 cm (c) thickness 9 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Damaged.

69. STRUCTURE NO. EH-56

1. Location : Square no. XF1, Quadrant no. 1
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (4), sealed by layer (1) and contemporary layer (3 & (2)
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure : (a) length 5.10 m (b) width 0.98 m (c) height 0.30 m
6. Number of courses : three courses
7. Masonry and bond : headers, (late) headers and stretchers (English bond)
8. Composition of plaster : Greenish clay
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 35 cm (b) breadth 20 cm (c) thickness 8 cm; (a) length 34 cm (b) breadth 22 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Upper course damaged

70. STRUCTURE NO. EH-57

1. Location : Square no. XF1 and XE1, Quadrant no. 3 and 4
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (5), contemporary layer (4), (3) and (2), sealed by layer (1)
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure : (a) length 3.75 m (b) width 0.70 m (c) height 0.72 m
6. Number of courses : seven courses
7. Masonry and bond : headers and stretchers, English bond
8. Composition of plaster : Greenish clay
9. Orientation of longer axis : north south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 33 cm (b) breadth 22 cm (c) thickness 12 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Upper course damaged, lower was in very good condition.

71. STRUCTURE NO. EH-58

1. Location : Square no. XF1, Quadrant no. 3
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (3A), sealed by layer (1) and layer (2) is contemporary
4. Period and structural phase : Period I, Early Harappan, phase 3
5. Measurement of structure : (a) length 1.32 m (b) width 0.30 m (c) height 0.20 m
6. Number of courses : two courses
7. Masonry and bond : headers and stretchers, English bond
8. Composition of plaster : Greenish clay plaster
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 34 cm (b) breadth 23 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Good condition bricks, upper course damaged.

72. STRUCTURE NO. EH-59

1. Location : Square no. XF1 and XE1, Quadrant no. 3 and 4
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (3A), sealed by layer (1) and layer (2) is contemporary
4. Period and structural phase : Period I, Early Harappan, phase 3
5. Measurement of structure : (a) length 1.00 m (b) width 0.34 m (c) height 0.10 m
6. Number of courses : one course
7. Masonry and bond : Stretchers
8. Composition of plaster : Greenish plaster
9. Orientation of longer axis : north-south

and turning to east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 34 cm (b) breadth 24 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Damaged.

73. STRUCTURE NO. EH-60

1. Location : Square no. XE1, Quadrant no. 4
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (3), sealed by layer (1)
4. Period and structural phase : Period I, Early Harappan, phases 2 and 3
5. Measurement of structure : (a)length 3.30 m (b) width 0.35 m (c) height 0.41 m
6. Number of courses : four courses
7. Composition of plaster : Clay
8. Orientation of longer axis : north-south
9. Nature of bricks used : Mud-bricks
10. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
11. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Structure cut by a small rain gulley.

74. STRUCTURE NO. EH-60A

1. Location : Square no. XE1, Quadrant no. 4
2. Type of structure : Platform
3. Stratigraphic position : Built on layer (4)
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure : (a) length 1.50 m (b) width 1.50 m (c) height 10 m
6. Number of courses : two courses
7. Masonry and bond : headers and stretchers
8. Composition of plaster : Clay
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. State of preservation : Bricks are in good condition.

75. STRUCTURE NO. EH-61

1. Location : Square no. XF1, XE1, Quadrant no. 4
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (3), sealed by layer (1) joins STR-60
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure : (a) length 3.72 m (b) width 0.65 m (c) height 0.40 m
6. Number of courses : four courses
7. Masonry and bond : headers and stretchers
8. Composition of plaster : Clay
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b)breadth 20 cm (c) thickness 10 cm
12. State of preservation : Bricks are in good condition

76. STRUCTURE NO. EH-61A

1. Location : Square no. XF1, Quadrant no. 3
2. Type of structure : Semi-circular platform
3. Stratigraphic position : Built on layer (3), sealed by layer (1)
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure : (a) length 1.50 m (b) height 0.20 m
6. Number of courses : two courses
7. Masonry and bond : headers and stretchers
8. Composition of plaster : Thick muddy plaster
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b)breadth 20 cm (c) thickness 10 cm
12. Any other details regarding bricks, state

of preservation and shape and other distinguishing feature : Damaged

77. STRUCTURE NO. EH-62

1. Location : Square no. XE1, Quadrant no. 3
2. Type of structure : Platform
3. Stratigraphic position : Built on layer (5R), sealed by layer (1R)
4. Period and structural phase : Period I, Early Harappan, phase 5
5. Measurement of structure : (a)length 1.90 m (b)width 1.70 m (c) height 0.20 m
6. Number of courses : two courses
7. Masonry and bond : headers and stretchers
8. Composition of plaster : Greenish clay
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b)breadth 20 cm (c) thickness 10 cm
12. Any other details regarding bricks : Greenish bricks are available.

78. STRUCTURE NO. EH-63, 63A

1. Location : Square no. XE1, Quadrant no. 3
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (4), sealed by layer (3)
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure : STR-63 (a) length 0.85 m (b) width 0.32 m (c) height 0.10 m ; STR-63A (a) length 1.90 m (b) width 0.50 m (c) height 0.20 m
6. Number of courses : two courses
7. Masonry and bond : headers and stretchers, English bond
8. Composition of plaster : Clay
9. Orientation of longer axis : north-south was STR 63 joins east-west STR 63A
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b)breadth 20 cm (c) thickness 10 cm
12. State of preservation : Badly damaged.

79. STRUCTURE NO. EH-64

1. Location : Square no. XE1, Quadrant no. 2
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (6RD) and sealed by (6RA)
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure : (a) length 3.75 m (b) width 0.30 m (c) height 0.10 m
6. Number of courses : Single course
7. Masonry and bond : headers
8. Composition of plaster : Greenish plaster
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 36 cm (b)breadth 22 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Good condition.

80. STRUCTURE NO. EH-65A

1. Location : Square no. XE1, Quadrant no. 1 and 2
2. Type of structure : Walls
3. Stratigraphic position : Built on layer (6RA) and (5R) seals it.
4. Period and structural phase : Period I, Early Harappan, phase 5
5. Measurement of structure : (a) length 0.75 m (b) width 0.30 m (c) height 0.20 m
6. Number of courses : Two courses
7. Masonry and bond : headers
8. Composition of plaster : Greenish plaster
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 36 cm (b)breadth 22 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Good condition

81. STRUCTURE NO. EH-65B

1. Location : Square no. XE1, Quadrant no. 1 and 2

2. Type of structure : Walls
3. Stratigraphic position : Built on layer (6RA), STR-65A seals it
4. Period and structural phase : Period I, Early Harappan, phase 4
5. Measurement of structure : (a)length 0.75 m (b) width 0.36 m(c) height 0.10m
6. Number of courses : Single course
7. Masonry and bond : headers
8. Composition of plaster : Greenish plaster
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 36 cm (b)breadth 24 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Good condition

82. STRUCTURE NO. EH-65C

1. Location : Square no. XE1, Quadrant nos. 1 and 2
2. Type of structure : Walls
3. Stratigraphic position : Built on (6RD), (6R) seals it
4. Period and structural phase : Period I, Early Harappan, phase 3
5. Measurement of structure : (a) length 0.75 m (b) width 0.36 m (c) height 0.30 m
6. Number of courses : three courses
7. Masonry and bond : headers
8. Composition of plaster : Greenish plaster
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 36 cm (b)breadth 22 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Good condition

83. STRUCTURE NO. EH-65D

1. Location : Square no. XE1, Quadrant nos. 1 and 2
2. Type of structure : Walls
3. Stratigraphic position : Built on Natural soil, sealed (6RC)
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 0.75 m (b) width 0.36 m (c)height 0.10 m
6. Number of courses : Single course
7. Masonry and bond : headers
8. Composition of plaster : Greenish plaster
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 36 cm (b)breadth 22 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Good condition

84. STRUCTURE NO. EH-66

1. Location : Square no. XE1, Quadrant no. 1
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (6RA) and sealed by layer (6R)
4. Period and structural phase : Period I, Early Harappan, phases 3 and 4
5. Measurement of structure : (a) length 3.15 m (b) width 0.47 m(c) height 0.20 m
6. Number of courses : two courses
7. Masonry and bond : headers and stretchers
8. Composition of plaster : Nil
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b)breadth 22 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Good condition.

85. STRUCTURE NO. EH-66A

1. Location : Square no. XE1, Quadrant no. 1
2. Type of structure : Wall
3. Stratigraphic position : Built on Natural soil

4. Period and structural phase : Period I, Early Harappan, phases 1, 2 and 3
5. Measurement of structure : (a) length 4.90 m (b) width 0.70 m(c) height 1.20 m
6. Number of courses : ten courses
7. Masonry and bond : headers and stretchers
8. Composition of plaster : Greenish plaster
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 34 cm (b)breadth 25 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Good condition.

86. STRUCTURE NO. EH-67 AND 67A

1. Location : Square no. XE1, Quadrant no. 1
2. Type of structure : Walls
3. Stratigraphic position : Built on layer (4), contemporary layers (3) and (2), sealed by layer (5R)
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : north-south wall (a) length 3.35 m (b) width 0.75 m (c) height 0.95 m; east-west wall (a) length 2.20 m (b) width 20 cm (c) height 0.82 m
6. Number of courses :eight courses
7. Masonry and bond : headers and stretchers, English bond
8. Composition of plaster : Greenish clay
9. Orientation of longer axis : east-west and north-south (2m 20 cm 20cm)
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 32 cm (b)breadth 22 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Damaged by a pit remaining bricks intact.

87. STRUCTURE NO. EH-68

1. Location : Square no. YX1 and XE1, Quadrant 1
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (4), sealed by layer (2) and contemporary layers are (3) & (2)
4. Period and structural phase : Period I, Early Harappan, phases 2 and 3
5. Measurement of structure : (a)length 3.85 m (b) width 0.85 m (c)height 0.45 m
6. Number of courses : four courses
7. Masonry and bond : headers, English bond
8. Composition of plaster : Greenish
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 32 cm (b)breadth 24 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Upper two courses damaged by pit.

88. STRUCTURE NO. EH-69

1. Location : Square no. XF1, Quadrant nos. 1 and 2
2. Type of structure : Wall
3. Stratigraphic position : Built on the top of layer (6SA), contemporary deposit layer (5) and sealed by layer (4)
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a)length 5.05 m (b) width 0.31 m(c) height 0.18 m
6. Number of courses : two courses
7. Masonry and bond : headers
8. Composition of plaster : Nil
9. Orientation of longer axis : east-west (oblique)
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 32 cm (b)breadth 24 cm (c) thickness 11 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Top course damaged.

89. STRUCTURE NO. EH-70

1. Location : Square no. XF1, Quadrant nos. 1 and 2
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (6SB), contemporary layer (6SA) and layer (2) seals it
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 2.09 m (b) width 0.30 m(c) height 0.22 m
6. Number of courses : two courses
7. Masonry and bond : headers, English bond
8. Composition of plaster : Clay
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. State of preservation : northern corner eroded.

90. STRUCTURE NO. EH-71

1. Location : Square no. XF1, Quadrant no. 1
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (7), contemporary deposit layers are (6), (5) and (4) sealed by (3).
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a)length 2.86 m (b) width 0.33 m(c) height 0.32 m
6. Number of courses : three courses
7. Masonry and bond : headers, English bond
8. Composition of plaster : Greenish plaster
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 32 cm (b) breadth 24 cm (c) thickness 11 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Very good condition of bricks. Bricks made of clay with granules.

91. STRUCTURE NO. EH-72

1. Location : Square no. XF1, Quadrant nos. 1 and 2
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (6SB), contemporary layer (6SA), sealed by layer (2)
4. Period and structural phase : Period I, Early Harappan, phase 3
5. Measurement of structure : (a)length 3.09 m (b) width 0.30 m(c) height 0.22 m
6. Number of courses : two courses
7. Masonry and bond : headers and stretchers, English bond
8. Composition of plaster : Nil
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 24 cm (c) thickness 11 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Top course eroded. Condition of bricks are good.

92. STRUCTURE NO. EH-73

1. Location : Square no. XF1, Quadrant nos. 1 and 2
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (7), contemporary layers are (4), (5) and (6) and sealed by layer (3)
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a)length 1.00 m (b)width 0.24 m (c) height 0.30 m
6. Number of courses : three courses
7. Masonry and bond : Stretchers, English bond
8. Composition of plaster : Greenish clay plaster
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 24 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other

distinguishing feature : Very good condition, due to conflagration - the wall has turned reddish.

93. STRUCTURE NO. EH-74

1. Location : Square no. XF1, Quadrant no. 1
2. Type of structure : Wall
3. Stratigraphic position : Built on the top of layer (7), contemporary layers are (2), (3), (4), (5) and (6), sealed by layer (1)
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 4.20 m (b) width 0.90 m (c) height 0.56 m
6. Number of courses : five courses
7. Masonry and bond : three headers make the width, headers are put, English bond
8. Composition of plaster : Greenish plaster
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 34 cm (b) breadth 23 cm (c) thickness 10 cm; (a) length 28 cm (b) breadth 22 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Northern corner badly damaged.

94. STRUCTURE NO. EH-74A

1. Location : Square no. XF1, Quadrant nos. 1-2
2. Type of structure : Wall
3. Stratigraphic position : Built on top of layer (5), contemporary layer are (2), (3) and (4), sealed by layer (1)
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 4.25 m (b) width 0.30 m (c) height 0.61 m
6. Number of courses : six courses
7. Masonry and bond : headers, English bond one brick wall
8. Composition of plaster : Nil
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 22 cm (c) thickness 11 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Badly damaged by pit no. 1 sealed by pit no. 2 in southern side.

95. STRUCTURE NO. EH-75

1. Location : Square no. XF1, Quadrant nos. 2 and 4
2. Type of structure : Wall
3. Stratigraphic position : Built on the top layer (2), sealed by layer (1)
4. Period and structural phase : Period I, Early Harappan, phase 4
5. Measurement of structure : (a) length 1.18 m (b) width 0.63 m (c) height 0.09 m
6. Number of courses : Single course
7. Masonry and bond : headers and stretchers on plan
8. Composition of plaster : Clay
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a)length 30 cm (b) breadth 22 cm (c) thickness 9 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Badly damaged.

96. STRUCTURE NO. EH-76

1. Location : Square no. XF1, Quadrant nos. 1 & 2
2. Type of structure : Wall
3. Stratigraphic position : Built on Natural soil, sealed by layer (3)
4. Period and structural phase : Period I, Early Harappan, phase 1
5. Measurement of structure : (a) length 5.50m (b) width 0.30m (c) height 0.20m
6. Number of courses : two courses
7. Masonry and bond : headers, English bond



Pl. XXI *KLB-1 : burnt-bricks drain. See p. 54*

YB-4

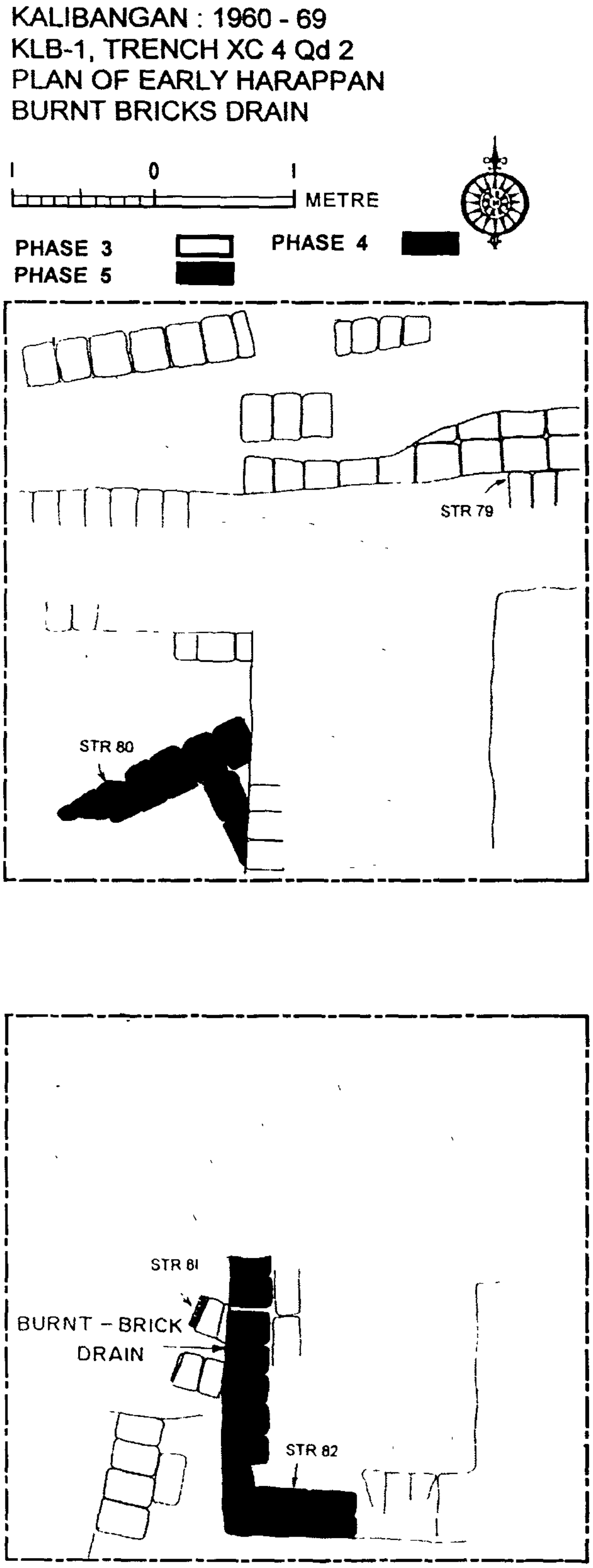


Fig. 17

8. Composition of plaster : Clay
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. State of preservation : In good condition.

97. STRUCTURE NO. EH-77

1. Location : Square no. XF1, Quadrant no. 2 and XE1 Qd1
2. Type of structure : Wall
3. Stratigraphic position : Built on the top of layer (4), contemporary layer (3), sealed by layer (2)
4. Period and structural phase : Period I, Early Harappan, phase 3
5. Measurement of structure : (a) length 3.10 m (b) width 0.64 m (c) height 0.32 m
6. Number of courses : three courses
7. Masonry and bond : headers and stretchers put in alternate order. In between the bricks small mud bricks have filled the width.
8. Composition of plaster : Greenish Plaster
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 21 cm (c)thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Badly damaged.

98. STRUCTURE NO. EH-78

1. Location : Square no. XF1, Quadrant no. 1
2. Type of structure : Wall
3. Stratigraphic position : Built on the top of layer (4), contemporary layer (3) sealed by layer (1)
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure : (a)length 3.60 m (b) width 0.30 m(c) height 0.10 m
6. Number of courses : One course
7. Masonry and bond : headers
8. Composition of mortar : Clay with earth
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. Shape and other distinguishing feature : This wall is between STR 77 and STR 68.

99. STRUCTURE NO. EH-79

1. Location : Square no. YC-5, Quadrant no. 3
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (4) and sealed by layer (2)
4. Period and structural phase : Period I, Early Harappan, phase 3
5. Measurement of structure : (a) length 2.55 m (b) width 0.70 m(c) height 0.10m
6. Number of courses : Single course
7. Masonry and bond : headers and stretchers
8. Composition of mortar : Clay with earth
9. Orientation of longer axis : east-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. Shape and other distinguishing feature : Thick wall, damaged condition due to rain gulley.

100. STRUCTURE NO. EH-80

1. Location : Square no. YC-5, Quadrant no. 3
2. Type of structure : Wall of a room
3. Stratigraphic position : Built on layer (3) and sealed by layer (2)
4. Period and structural phase : Period I, Early Harappan, phase 4
5. Measurement of structure : (a) length 1.50 x 1.00 m (b) width 0.30 m (c) height 0.20 m
6. Number of courses : two courses
7. Masonry and bond : headers and stretchers, English bond
8. Composition of mortar : Clay with earth

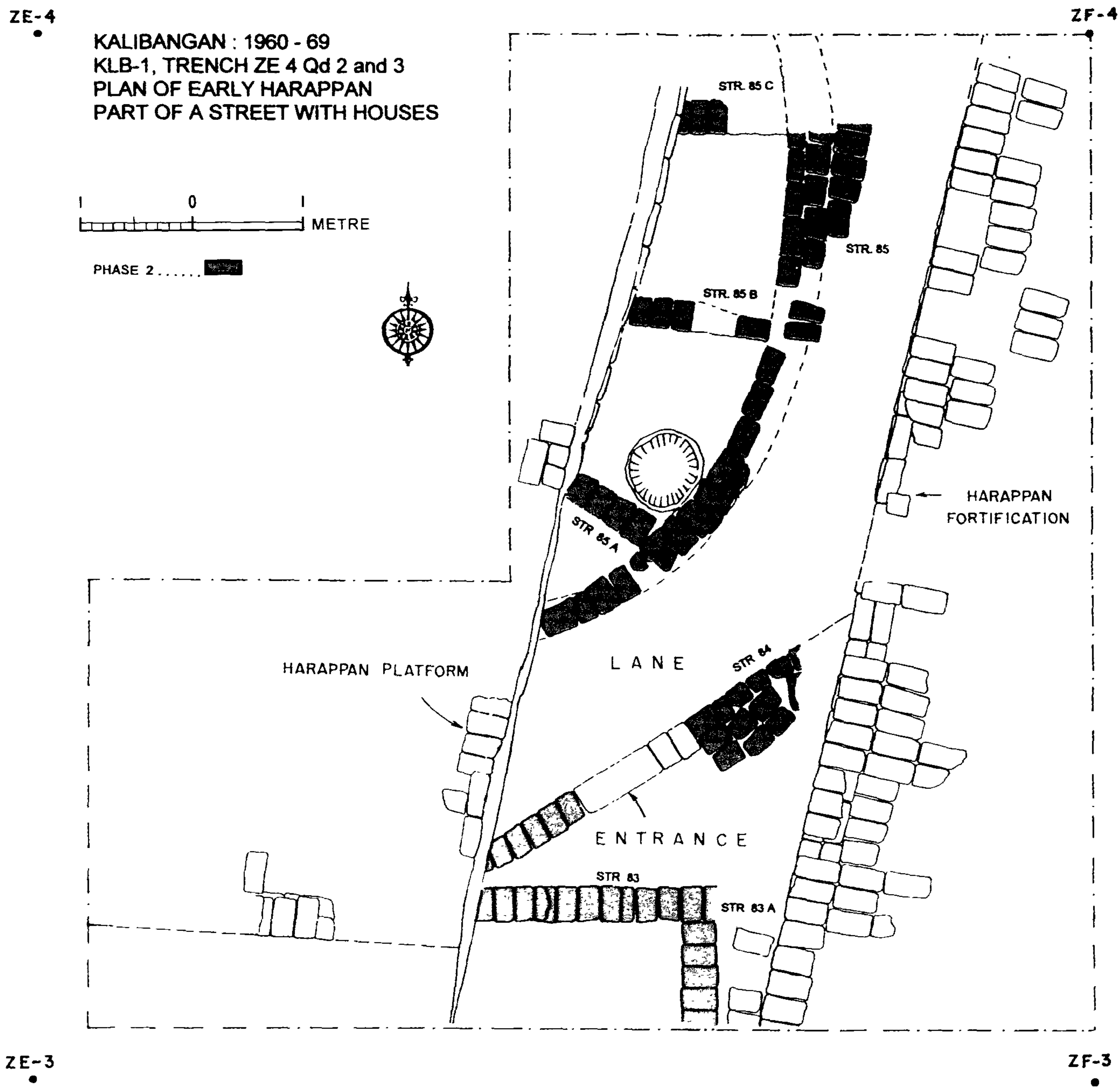

ZE-4
ZF-4
KALIBANGAN : 1960 - 69
KLB-1, TRENCH ZE 4 Qd 2 and 3
PLAN OF EARLY HARAPPAN
PART OF A STREET WITH HOUSES
1 0 1
METRE
PHASE 2......
STR. 85 C
STR. 85
STR. 85 B
STR 85 A
HARAPPAN FORTIFICATION
HARAPPAN PLATFORM
LANE
STR 84
ENTRANCE
STR 83
STR 83 A
ZE-3
ZF-3

Fig. 18

9. Orientation of longer axis : north-east to south-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. State of preservation : Portion of a room not fully exposed.

101. STRUCTURE NO. EH-81 [FIG. 17]

1. Location : Square no. XC-4, Quadrant no. 2
2. Type of structure : Drain with two side walls
3. Stratigraphic position : Built on layer (7), contemporary deposite is layer (6), sealed by layer (5). It is below a Harappan platform
4. Period and structural phase : Period I, Early Harappan, phase 3
5. Measurement of structure : (a) length 0.40 m (b) width 0.30 m (c) height 0.30 m ; Gap width - 0.15m, length 0.40 m
6. Number of courses : three courses
7. Masonry and bond : headers
8. Composition of mortar : Clay with earth
9. Orientation of longer axis : east-west
10. Nature of bricks used : Burnt bricks
11. Dimension of bricks : (a) length 27 cm (b) breadth 18 cm (c) thickness 9 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : Well preserved. Drain not fully exposed.

102. STRUCTURE NO. EH-82

1. Location : Square no. YC-4, Quadrant no. 2
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (4), sealed by layer (2)
4. Period and structural phase : Period I, Early Harappan, phase 4
5. Measurement of structure : (a) length 2.00 m (b) width 3.00 cm (c) height 0.12 cm
6. Number of courses : One course
7. Orientation of longer axis : north-south and east-west
8. Nature of bricks used : Mud-bricks
9. Dimension of bricks : (a) length 36 cm (b) breadth 18 cm (c) thickness 12 cm
10. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : This is a thick wall having mud filling in between width of 25 cm

103. STRUCTURE NO. EH-83 & 83A [FIG. 18]

1. Location : Square no. ZE4, Quadrant nos. 2 & 3
2. Type of structure : Wall
3. Stratigraphic position : Built on layer (5) and sealed by layer (3)
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure : (a) length 2.30 m (b) width 30 cm (c) height 20cm
6. Number of courses : two courses
7. Masonry and bond : English bond
8. Composition of plaster : Greyish mud
9. Orientation of longer axis : east-west and north-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : This wall no. 83 joins wall no. 83A which runs north-south and has a length of 1.30m & width of 30 cm

104. STRUCTURE NO. EH-84

1. Location : Square no. ZE4, Quadrant nos. 2 & 3
2. Type of structure : Wall and platform on eastern side
3. Stratigraphic position : Built on layer (5) and sealed by layer (3)
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure : (a) length 3.60 m (b) width 30 cm and 70 cm (c) height 30 cm
6. Number of courses : course

7. Masonry and bond : English
8. Composition of plaster : Greyish
9. Orientation of longer axis : north-east to south-west
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : The structure is on the side of the street. It has door, three wild space of 1 m of the street, facing structural complex 85.

105. STRUCTURE NO. EH-85 & 85ABC

1. Location : Square no. ZE4, Quadrant nos. 2 & 3
2. Type of structure : Outer wall of semicircular structural complex having three-walls marked 85A, 85B and 85C
3. Stratigraphic position : Built on layer (6), sealed by (3)
4. Period and structural phase : Period I, Early Harappan, phase 2
5. Measurement of structure : (a) length 5 m (b) width 0.70 - 30 (c) height 40 cm
6. Number of courses : Four courses
7. Masonry and bond : English bond
8. Composition of plaster : Greyish plaster
9. Orientation of longer axis : north-south
10. Nature of bricks used : Mud-bricks
11. Dimension of bricks : (a) length 30 cm (b) breadth 20 cm (c) thickness 10 cm
12. Any other details regarding bricks, state of preservation and shape and other distinguishing feature : The structural complex has three walls number 85 A B C having an average exposed length e.g. 85A 80 cm, 85B 1.40 m, 85C 1 m and a hearth having diameter of 0.72 m. The hearth is plastered in the outer edge. STR-84 and STR 85 appears to be part of a lane/street having a width of 1.40 m.

THE AGRICULTURAL FIELD

8

B.B. Lal

While dealing with the main discoveries relating to Period I at Kalibangan (Chapter 3) we referred in passing to an agricultural field associated with this period. Here, we would like to go into its details.

We had laid out a trench at a distance of about 70 m to the south of the fortification, in order to ascertain if there was any habitation outside the fortified area as well. In the small trial-pit that we began with, we did not discover any structural remains. Instead, we came across some dark parallel stripes, each about 4-5 cm in width. These were oriented east-west and lay at a distance of about 30 cm from one another. We wondered as to what these stripes could have been. Two different ideas ran across our minds. We first imagined that these might represent the decomposed remains of split bamboos used in some kind of fencing. In the alternative, we thought that these might have been furrow-marks. However, as we widened the trial-pit we came across not only more of these east-west stripes but also a few others cutting the former at right angles. These latter were placed at a distance of 1.9 m from one another. Although, this new evidence did not fit well into the fence-theory, yet we thought that the widely distanced stripes might represent cross-bars, used to strengthen the other set. However, when the trench was further extended we found both the sets of stripes running all over the area (pl. XXII) Surely, there could not have been a fencing of such a size, particularly in terms of the height. Thus, we had to set aside the fence-theory and had to examine more seriously the furrow-marks hypothesis.

In the company of local people we went around the neighbouring villages and to our pleasant surprise we found that the present agricultural fields are also furrowed on the same criss-cross pattern (pl. XXIII A). Today, the farmers grow chickpea in the short distance furrows and mustard in the wide-distance ones (pl. XXIII B). They told us that this is what their forefathers had been doing generation after generation.

We may now examine the nuances of this kind of patterning and reasons for the sowing of a particular kind of crop in the east-west furrows and of another in the north-south ones. In this context it may be pointed out that both chickpea and mustard are winter crops. Kalibangan, as already stated earlier, is located between 29 and 30 degree northern latitudes. Thus, even during the summer season when the northern hemisphere is inclined towards the sun, at Kalibangan the shadows fall to the north. However, during winters when the northern hemisphere moves relatively away from the sun, the shadows are much longer. Further to be noted is the fact that the mustard plant is much taller than that of the chickpea. Thus, in order to ensure that the shadows of the long mustard plant do not cover up the chickpea plants, the former are grown in the north-south furrows and the latter in the east-west ones. If the laying out of these plants is the other way about, i.e., if the mustard plants are grown in the east-west furrows and the chickpea in the north-south ones, the result would be disastrous. The long shadows of the mustard plants would deprive the chickpea plants of sunlight and consequently hamper their growth. Should we not give full marks to the Early Harappans who devised this arrangement? Since the



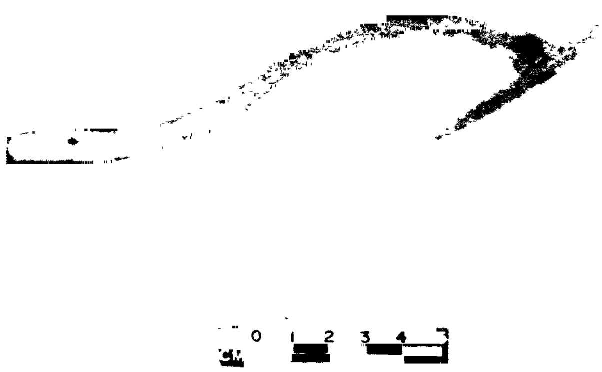
Pl XXII *KLB-1-2 furrow-marks in the southern half of the trench Note at the extreme top left a Mature Harrppan mud-brick wall which came up after the desection of this Early Harrppan field See pp 95 & 98*



Pl XXIII [illegible] See p 95



Pl. XXIII B : *modern method of growing chickpea and mustard in criss-cross furrowed field. See p. 95*



Pl. XXIII C : *a plough from Harappan levels, Banawali. See p 98*

system was adopted, it was continued over the millennia. Today this kind of criss-cross, east-west and north-south, system of furrowing is in vogue not only in Rajasthan, where Kalibangan is located, but also in Haryana, Panjab and western parts of Uttar Pradesh — almost covering the very region wherein the Harappan Civilization flourished in northern India.

Terracotta models of ploughs (pl. XXIII C), found at Kalibangan and Banawali, give an idea of the type used by the Mature Harappans. It may reasonably be assumed to have been the type used by the Early Harappans as well. It is also interesting to note that it is not much different from what is in use today. As in the case of the present-day examples, in the case of the Harappan ones too, the main body must have been of wood, to the actual digging end of which a sharp metallic piece must have been attached.

At the end we would like to mention some facts about the stratigraphic horizon of the Kalibangan agricultural field. Overlying the furrows was a thin layer of sand signifying desertion. Above it was a layer containing pottery and allied material ascribable to the Mature Harappan period. At the eastern end of the trench was discovered a mud-brick wall associated with this pottery-bearing layer. Further, the wall itself was found to overlie the thin sand layer which, as already stated, was later than the field itself (pl. XXII). Again in the western part of the trench, remains of small mud enclosures and ash-pits with Mature Harappan material were noted cutting across the furrow-marks. All this evidence clearly demonstrates that the agricultural field was pre-Mature Harappan in terms of time. It may thus safely be placed in the first quarter of the third millennium BC (See also Chapter 4 on Chronology.)

Incidentally, it may be added that, as far as we are aware, this is the earliest example of an agricultural field brought to light through an archaeological excavation anywhere in the world.

THE END OF THE EARLY HARAPPAN SETTLEMENT AT KALIBANGAN

9

B.B. Lal

It would be interesting to find out what brought about the end of the Early Harappan settlement at Kalibangan. In this context, attention may be drawn to two photographs, respectively on pls. XXIV and XXV.

Looking at pl. XXIV, one is at once struck by the unusual behaviour of the layers in the front elevation. The layers do not run continuously. Instead, these are 'broken' at a number of places. For example, if one observes the first black layer from the top one finds that (i) it does not run horizontally, as an occupational layer should do, and (ii) it is cleft at least at three places, being thus divided into four parts. These parts not only are of uneven length, but also occur in a stepped fashion, each one of the left being at somewhat lower level than the one on its right. In fact, one may even see the slightly oblique cleavage lines between these broken and stepped parts of this layer. This very feature is also noticeable in respect of a few other layers below it, though in layers having greyish or whitish colour this feature does not come out so clearly in a black-and-white photograph.

One may now have a look at pl. XXV. In it one sees not only a series of layers, but also two mud-brick walls in elevation. Of these, while the upper wall is only slightly bent down, the lower one clearly shows a cleavage on the left-hand side. In conformity with the foregoing, the underlying black and grey layers also highlight the cleavage.

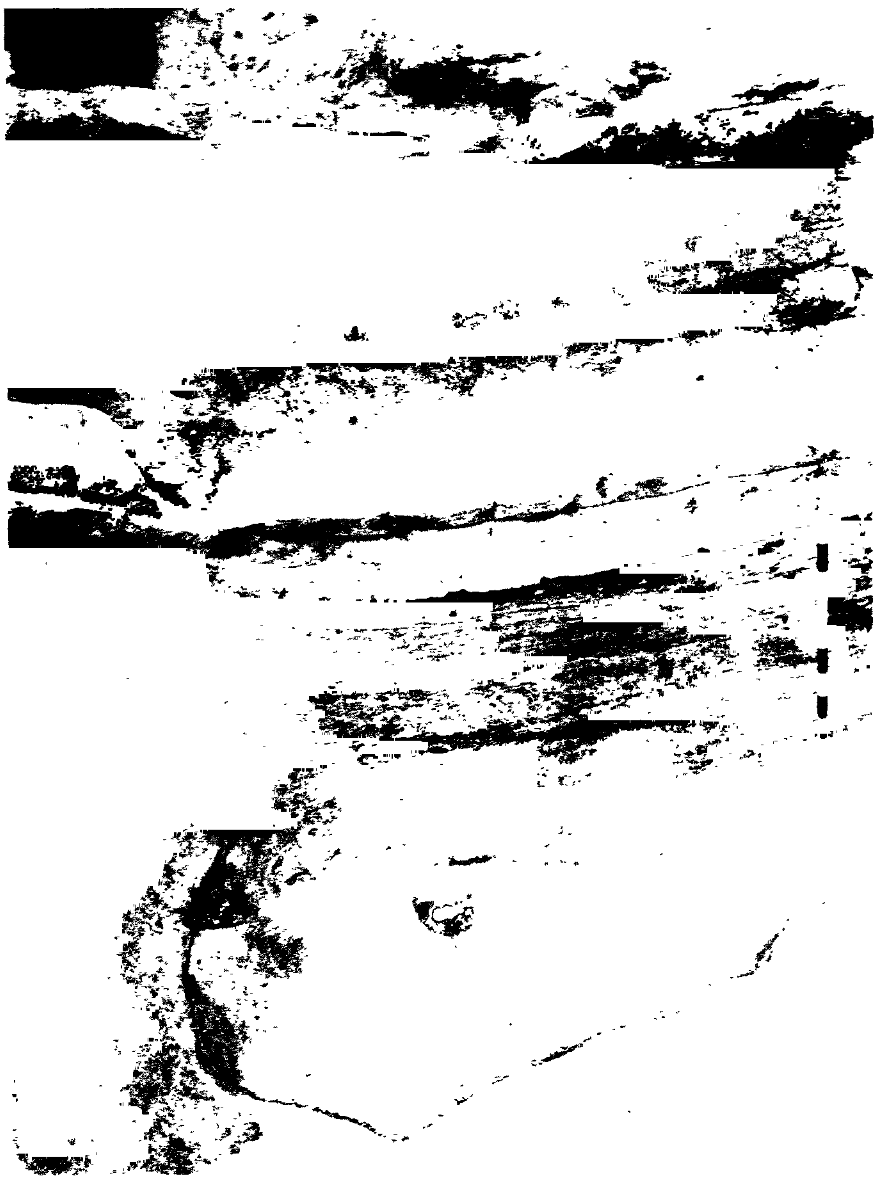
A natural question then arises: what is it that caused the cleavage not only of the layers but also of the walls? This could have happened only if there was a violent earth-movement. And this movement obviously took place only after these walls and layers



Pl XXIV *faulted strata* See p 99

had come into existence. Whereas pl. XXV does not cover the upper levels of the trench, pl. XXIV does. From this later plate it is seen that even the uppermost layers are affected by this earth-movement. All this implies that the violent shaking of the area, which in other words would mean an earthquake, brought about the end of the Early Harappan occupation at Kalibangan. The available evidence indicates that the site was abandoned for some time, may be a century or so, after which it was re-occupied by the Mature Harappans. As discussed (Chapter 4), on the basis of radiocarbon dates the end of the Early Harappan settlement may be placed around 2700 BC.

The authors are not aware of any evidence of such an early earthquake encountered in an archaeological excavation. If that be so, this would be the earliest archaeologically recorded earthquake.



Pl XXV . *sagged walls* *See p 100*

THE POTTERY

10

Madhu Bala

TECHNIQUE

The pottery of Early Harappans (Period I) from Kalibangan is marked by its different fabrics, shapes and design repertoire. However, keeping in view the high standard of maturity achieved by the Harappans in the technique of pottery manufacture, the Early Harappan pottery generally indicates a lesser degree of perfection. The bulk of pottery has (i) grey and black colour in the section showing bad or ill firing as compared to the Harappan pottery; (ii) use of inferior clay which is not very well levigated mixed with sand used as degraissant and presence of calcium and magnesium as determined by chemical analysis, (iii) striation marks are not regular and horizontal behaviour is almost missing, in Fabric A which reveals a 'differential finishing of the walls with different tools', the joints indicate coiling technique, the inner finishing has been done with a serrated tool (shell type) whose edge marks are clearly visible in a number of cases; rims have been separately made and luted to the body showing overlapping of edges by way of thickening at the edges[1] and the pottery has been fired at a low temperature, i.e. 400°C to 600°C[2] in an oxidizing kiln; (iv) turned out on a slow wheel the pots are comparatively light and thin in fabric, red to pinkish in colour. Generally, the pottery has a self slip. Some times dull red slip or bright red slip has been also applied. It is painted in black and combined at times with white over a self slipped dull surface. The lower portion of some of the pots is rusticated[3].

CLASSIFICATION OF POTTERY

B.K. Thapar[4] has made an elaborate study of the Early Harappan pottery and classified it into six fabrics[5]. However, the author discovered in 1996 a few sherds of

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1 Scientific analysis carried out by Velentine Roux on Early Harappan (Period I) pottery from Kalibangan has thrown significant light on potting techniques of the Early Harappan pottery and she has observed "replacement of the coiling technique with wheel throwing technique did occur in Fabric A, but how much time it took or whether it was gradual could not be inferred" and her conclusions are "The results obtained through analysis of macro and micro traces converge and lead to the following hypothesis the third millennium pottery of the Indus was formed without rotative Kinetic Energy by coiling, and finished either without rotative movement (some vessels from Fabric A and D) or with the rotative Kinetic Energy (vessels from Fabric B and C). This hypothesis can be applied onto Iranian material (study of ceremics from Shahr-i-Sokhta) and Mesopotamian material (study of ceramics from Khabur, Syria) It enables us to renew our interpretation of assemblages in Cultural terms where the potters of A,B and C are the same ones. If so what is the meaning of their co-existence ? What is the meaning, at Nal, of the co-existence of identical morphological types whole finishing has been made either without rotative movement, or with rotative movement, or with rotative Kinetic Enegy"

Velentine Roux, *Emergence of the Wheel Throwing Techniques in the Indus During the Third Millennium B C* (Preliminary Report), Paris, Sep, 1992, pls 1-3, 7, 8, 11, 12

Velentine Roux, in collaboration with Daniel Corbeta *The Potters Wheel, Craft Specialization and Technique Competence* (New Delhi, 1989), pp. 4-9

2 See, B.N Tandon, 'Scientific Analysis of Early Harappan pottery from Kalibangan' in this report p. 235

3 J.S Nigam has described in detail the method of rustication as "A clay solution often mixed with sand was applied on the body of the pot when it was dry out and before firing. Thus the applied solution while wet was removed gently created a series of horizontal or wavy bands or their combination on dendrite look. The flaking of rustication indicated that it was done before firing".

4 *Indian Archaeology 1962-63 - A Review*, pp.20-23.

5 According to J.S Nigam who was also associated with the excavation at Kalibangan for many seasons and had also made a field study of the pottery, the pottery of Kalibangan Period I could be divided in to three categories i.e Red Ware, Buff Ware and Grey Ware, having 'ill-fired' or ill textured and 'better textured, in each ware Nigam's classification is thought-provoking. However, at this stage we have retained Thapar's classification which is more elaborate for obvious reasons and has been so far accepted.

J S Nigam, "Sothi Pottery at Kalibangan: A Reappraisal", *Puratattva*, No. 26 pp. (New Delhi, 1996), 7-14

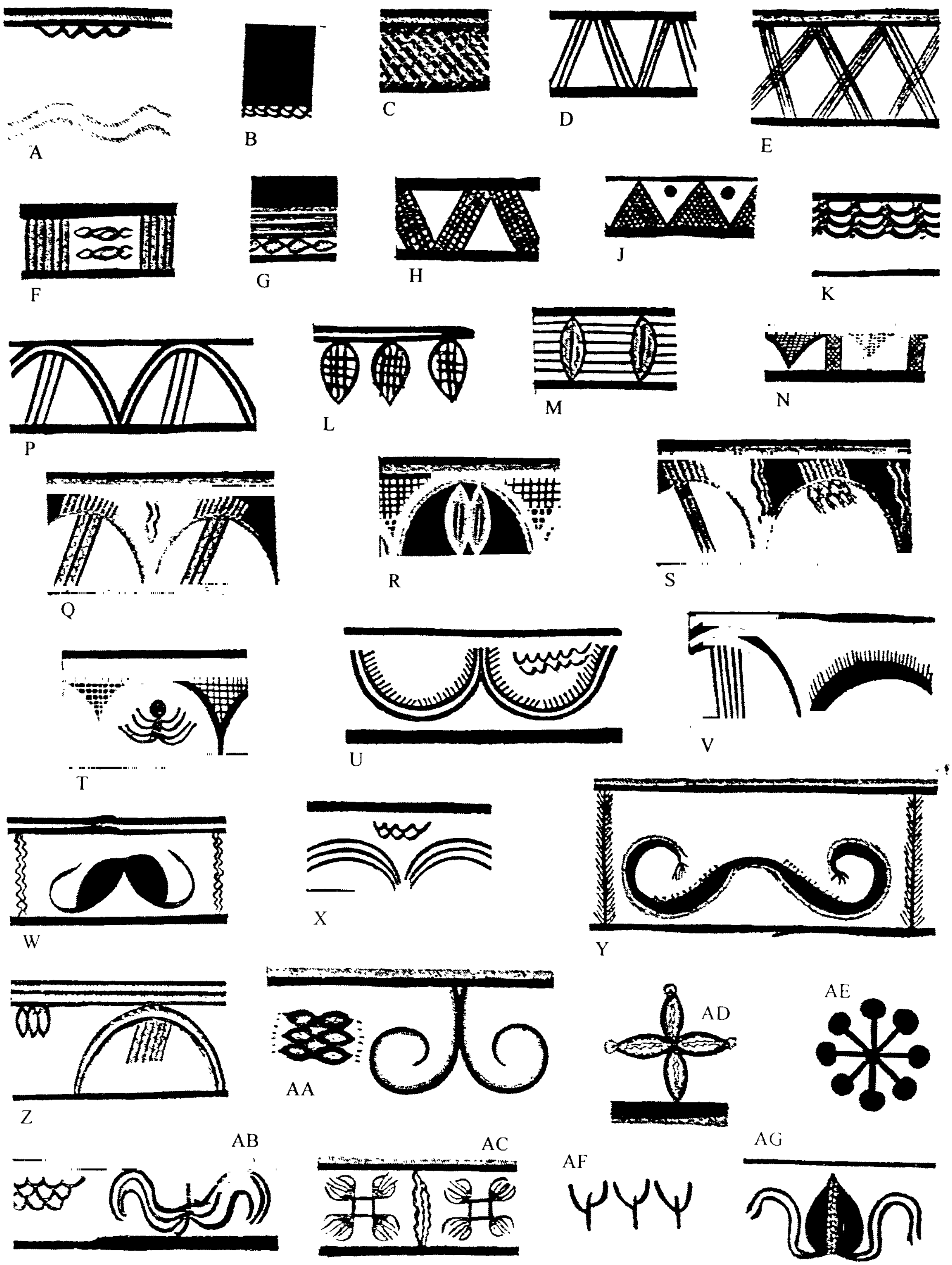


Fig. 19

Hakra Ware[1] which were also found in the milieu consisting of Hakra Applique ware and a Black-burnished Ware which could now be added to the earlier classification besides some greenish sherds having knobbed and impressed surface and few sherds of reserved slip ware. These sherds are few but make a separate class of ceramics. This could be an intrusive ware. Durrani[5] has reported such knobbed sherds from Rehman Dheri but very few of these are found there.

DIAGNOSTIC TRAITS OF POTTERY

The pottery of this Period was characterized by six fabrics, labelled for convenience as Fabrics A to F by Thapar which is as below :

Fabric A (fig. 19) was marked by an individuality which isolated it from the other fabrics. The vessels of this fabric, although made on wheel, were carelessly potted, betraying unskilled handling with tell-tale traces of irregular striations. Comparatively light and thin in section and red to pinkish in colour, most of the vessels were painted in black, combined at times with white (hatched in the drawings), over a dull-red surface, the field of decoration being confined to the Portion above the girth. The design elements, drawn in free style, included: horizontal bands, sometimes as thick as the height of the neck (fig. 19 B) and loops fringed below or enclosed by horizontal bands (fig. 19 A, B and K); criss-cross (fig. 19 C); grouped converging lines enclosing opposed triangles (fig. 19 D); or rhombs (fig. 19 E); latticed triangles(fig. 19 J); or ladders enclosing open opposed triangles (fig. 19 H); pendant latticed leaves bordered above by horizontal bands (fig. 19 L); vertical enclosing chain (fig. 19 F); lenticulars with multiple horizontals bordered above and below with thick bands (fig. 19 M); and segments or scallops with fillers (fig. 19 U and Z); and moustache-like bifold scroll within wavy verticals (fig. 19 W) or conifers (fig. 19 Y). A characteristic design, however, consisted of symmetrically joined semi-circles with intervening space, giving the effect of pendent concave-sides triangles (fig. 19 N-T). The triangles and the enclosed semi-circles being decorated with different patterns including criss-cross, oblique or wavy lines. ladders, lenticulars, spiders, etc. As fillers were used such motifs as: radiating lines ending in solid discs (fig. 19 AE); four-petalled flowers (fig. 19 AD); cactus-like plants (fig. 19 AF); and square with radiating triangles at the end (fig. 19 AC). The range of shapes was, however, very limited and comprised vases with out-turned or out-curved rims and dics or ring-bases (fig. 20,1-12) and bowls with tapering (fig. 20, 13-14) or convex (fig. 20, 15-21) sides. Of unusual interest were the pedestal-base (fig. 20,10) and the hole-mouth among (fig. 20, 12) the vase-forms and the cordoned profile (fig. 20, 20) in the bowls.

Fabric B (fig. 21) was distinguished primarily by its paste-texture and surface treatment. The vessels of this fabric were carefully potted on the wheel and were treated with a red slip upto the shoulder, the slipped area being further diversified by black-painted horizontal bands of varying thickness. The remaining surface of the vessels (excepting perhaps the base) was covered with a thin clayey solution, often mixed with sand, and while wet, roughened by horizontal or wavy combines (fig. 21 SA) or by tortoise-shell (?) or dendritic impressions (fig. 21 SB). Over this rusticated surface, naturalistic designs, floral, animal and bird (stag, ibex, bull, scorpion, duck, etc.) were painted in black, combined at times with the ancillary white (hatched in the drawings).

[5] M.R. Mughal *Ancient Cholistan : Archaeology and Architecture*, Lahore 1997. F.A. Durrani : 1988. Excavations in Gomal Valley Rehman Dheri Excavation Report, *Ancient Pakistan* No: 1. (Peshawar). p 97. pl XXIIA. Fig. XLVI

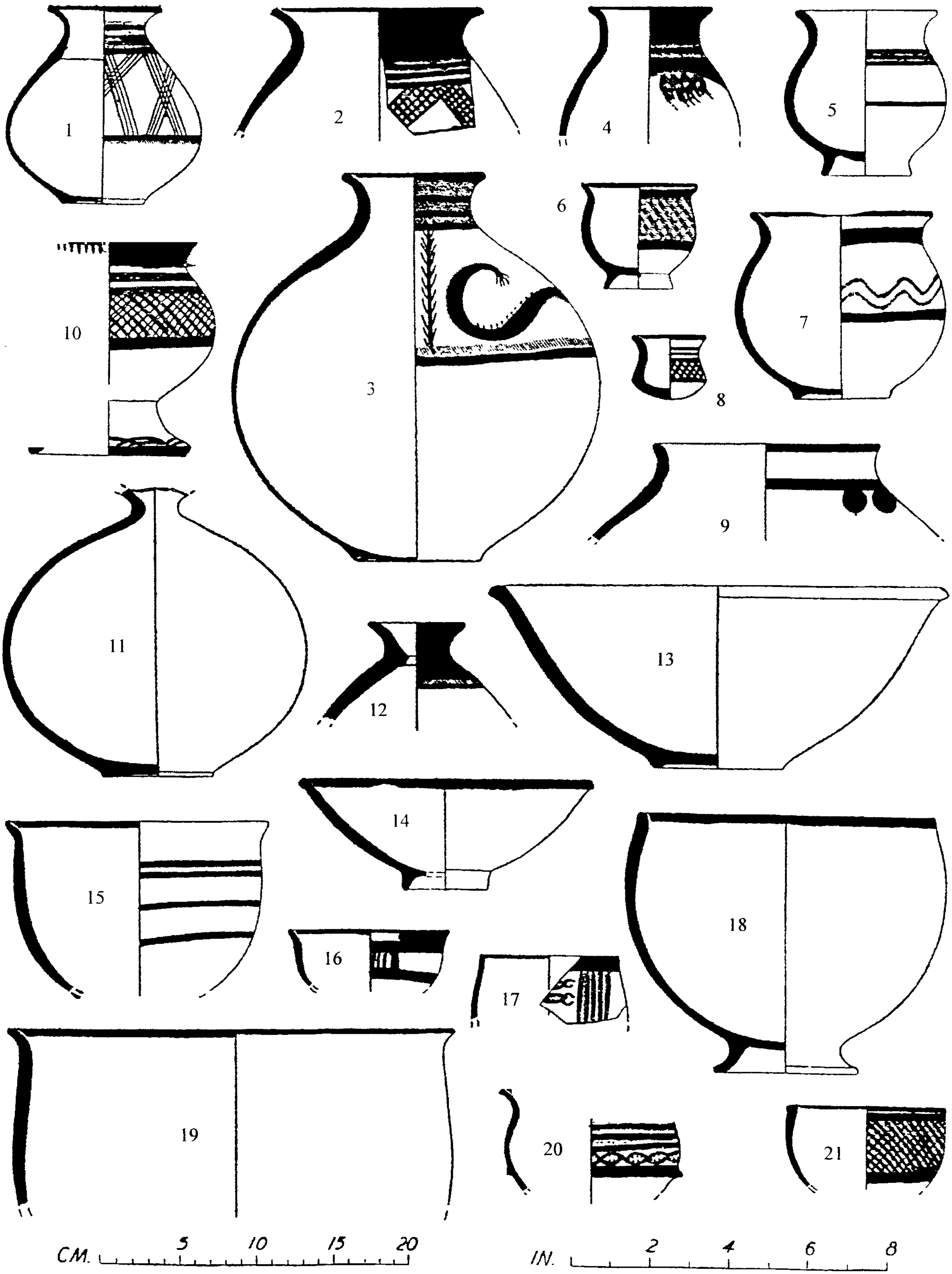


Fig. 20

Only one shape, viz. a globular jar with rim-forms, was represented in this fabric, of which the function is thus delimited.

Fabric C (fig. 22) was marked by a finer-textured paste and all over smooth-slipped surface in shades of red and plum or purple-red. The repertory of painted designs, which were essentially in black, included, besides the recurrent carefully-ruled horizontal bands or loops or criss-cross, borders of plant (fig. 22 A), scale (fig. 22 B and C), metopes (fig. 22 E), latticed loops or pendant triangles (fig. 22 F-J). Of special interest, however, criss-cross (fig. 22 G) and the butterfly or double-axe motif, wavy verticals (fig. 22 H) and the Indus scales (fig. 22 K). The shapes represented in this fabric comprised globular and ovoid vases with disc-bases (fig. 23, 1-10), lids (fig. 22, 11), straight-sided bowls (fig. 22-12) and dishes and offering stands (fig. 22, 13-18) including a noteworthy form with an extra-flared lip (fig.21, 16).

Fabric D (fig. 23 - 24) was characterized by vessels with thick sturdy section and slipped red surface[1]. Common shapes included heavy jars (fig. 23, 1-7) including the one with an accentuated flange round the neck (fig. 23, 6); bowls (fig. 23, 10-12) and basins or troughs (fig. 23, 13 and fig. 24, 14-17). The last-named, however, was the most characteristic of this fabric. The basins with a ring-base (fig. 24, 14-15) were decorated internally on the sides with sharp-ridged varying patterns (fig. 24 A-F) often bordered by wavy lines and on the outsides with single or multiple impressions (fig. 24, 14) rows of cord impressions. The incised patterns were executed by a reed fragment, when the paste was plastic or yielding, as evidenced by the raised or burred edges along the incised lines. The decoration on bowls (fig. 23, 10-12) and the flat-bottomed basins (fig. 24, 17) however, consisted of grouped wavy lines, doubtlessly produced by the employment of multiple-pronged tool held with a pencil grasp. Besides, black-painted horizontal bands and loops were not infrequent in this fabric. The tradition of incised design was carried in late Harappan and Bara pottery.[2]

Fabric E (fig. 25) comprised vessels with a buff or reddish buff slip. Common shapes included: large-and medium-sized jars (fig. 25, 1-9) including those with whole mouth (fig. 25) or a flange round the rim (fig. 25, 9); lids (fig. 25, 10-11); bowls (fig. 25, 15-16) and offering-stands and dishes (fig. 25, 12, 14, 17 and 19-21) including a small chalice (fig. 25, 13 D). The painted decoration (in black sometimes tending to purplish and occasionally white, pigment) consisted of the ubiquitous horizontal bands (fig. 25, 9) oblique lines with fronds (fig. 25 K); sigmas in horizontal sequence above joined semi-circles with fillers (fig. 25 J) and borders of scales (fig. 25 C) and latticed or plain scallops or loops (fig. 25 D and E); and such individualistic motifs as multi-petalled flowers fig. 25, 8 F), fish (fig. 25 A), cock (?) (fig. 25 B) and stylized butterfly or double-axe within,wavy verticals (fig. 25 H).

Fabric F (fig. 26) related to the grey-coloured pottery and was represented in forms viz. dish-on-stand (fig. 26, 1-3), basins, bowls (fig. 26, 4, 5,6) and vases (fig. 26, 7,8,9,10). For decoration the use of both and white the pigment (hatched in the drawing) was current.

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1 Fabric 'D' of Kalibangan I is available at Banawali, Distt Hissar, in pre Harappan levels which is identical The only distinctive factor is that the grooves are shallow and are not as deep as Kalibangan I At Banawali lugs and loop handles are also in fabric D Fabric D with shallow grooves also occurs at Manda. The explored pottery belonging to fabric D class from Gurni Kalan, Lakhmirwala, Danewala Theh, Dhalewan, Hasanpur and Raja Sirkap in Punjab has also shallow incised designs.

2 Madhu Bala, 'The pottery' in Jagat Pati Joshi, *Excavations at Bhagwanpura 1975-76 and other Explorations and Excavations 1975-1981* p 94 (fn), fig. 27 (New Delhi, 1993)

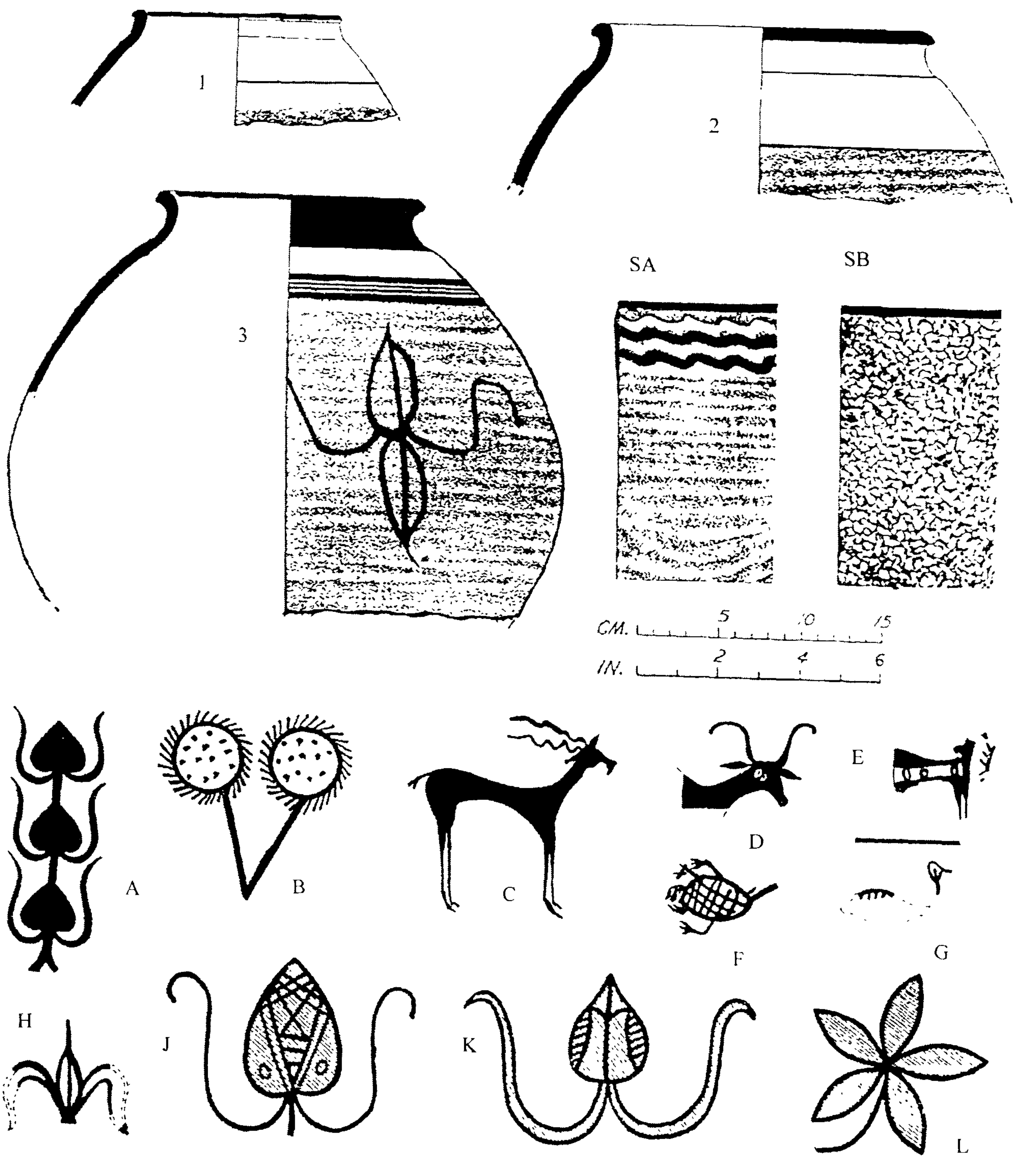


Fig. 21

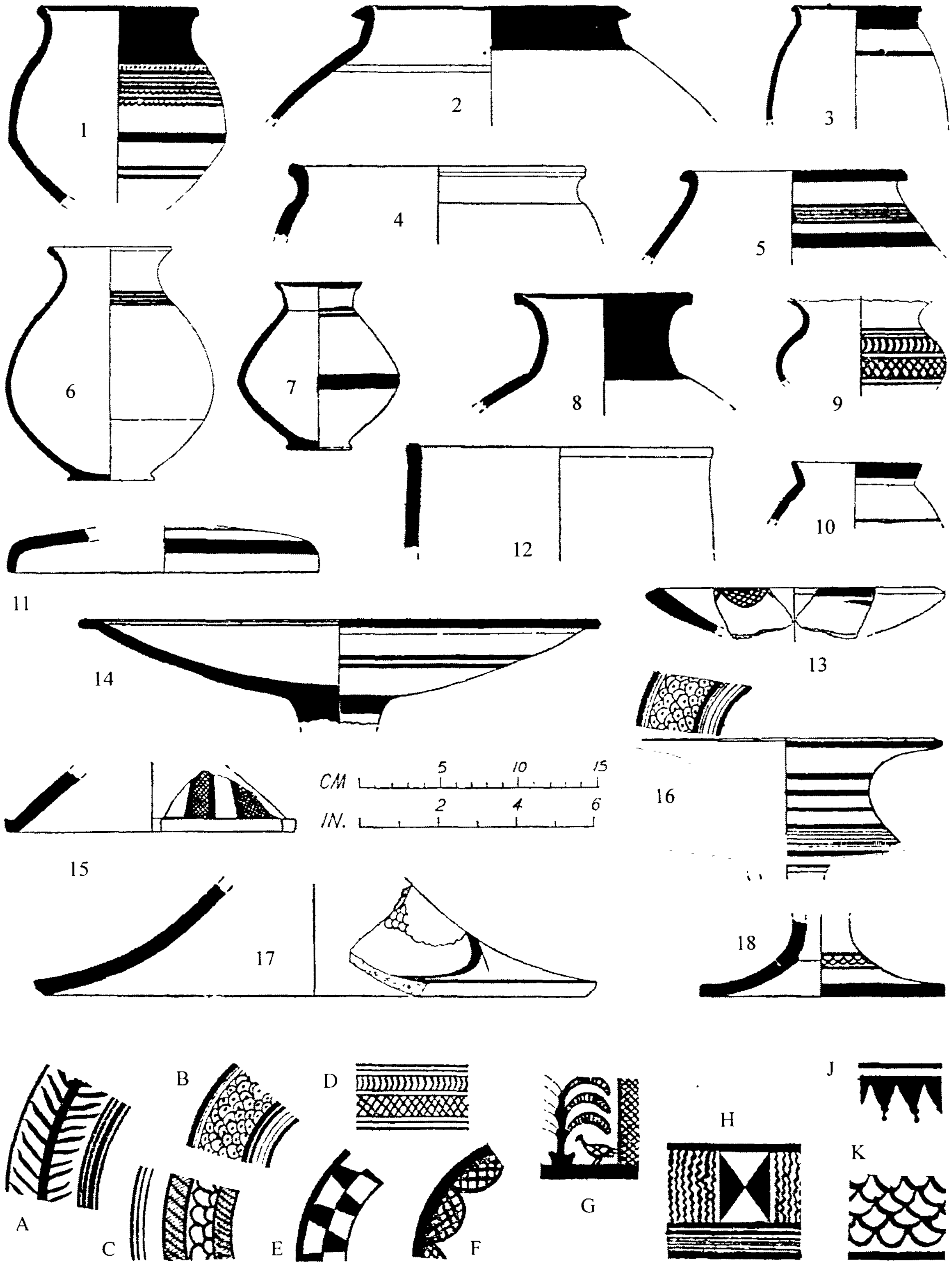


Fig. 22

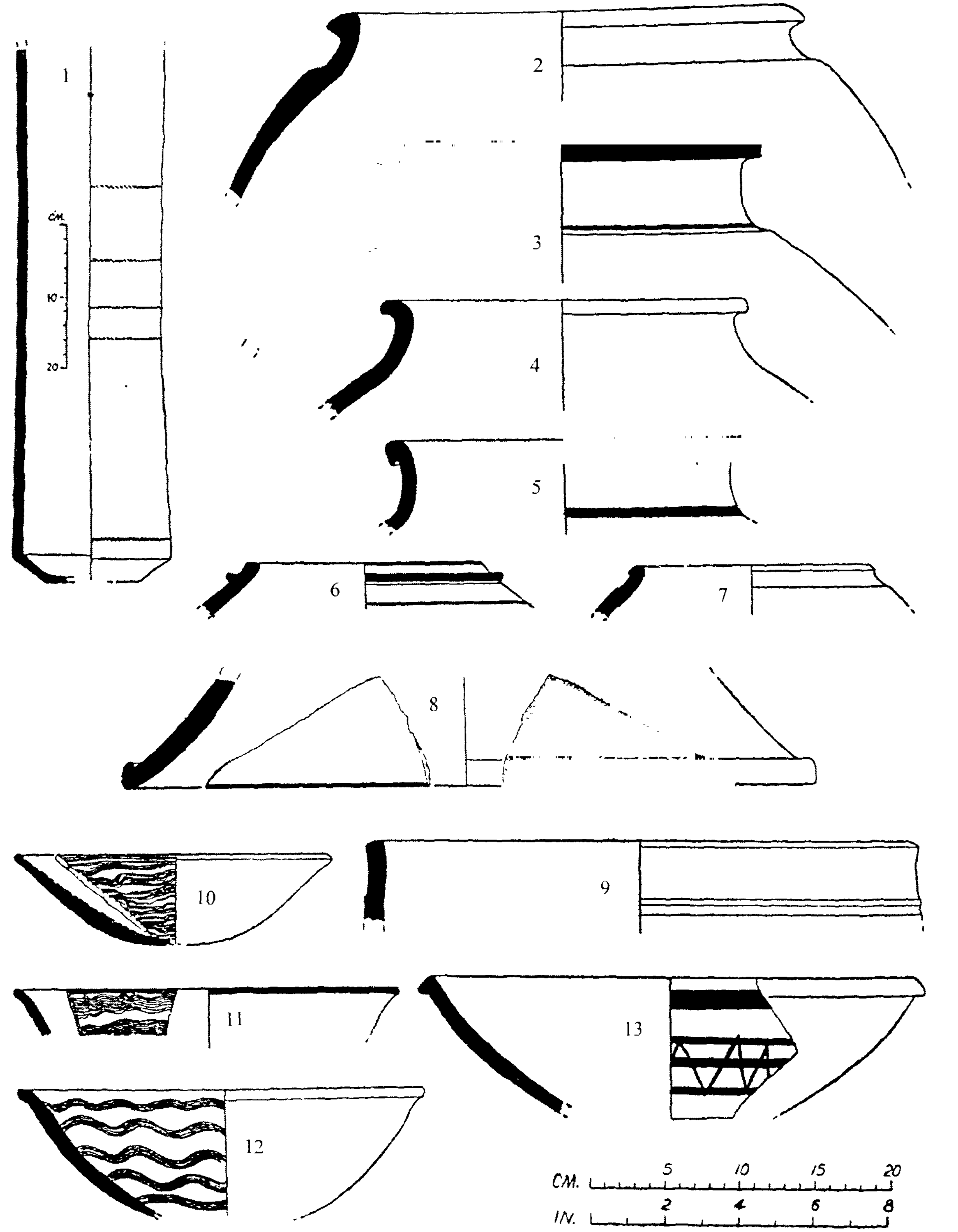


Fig. 23

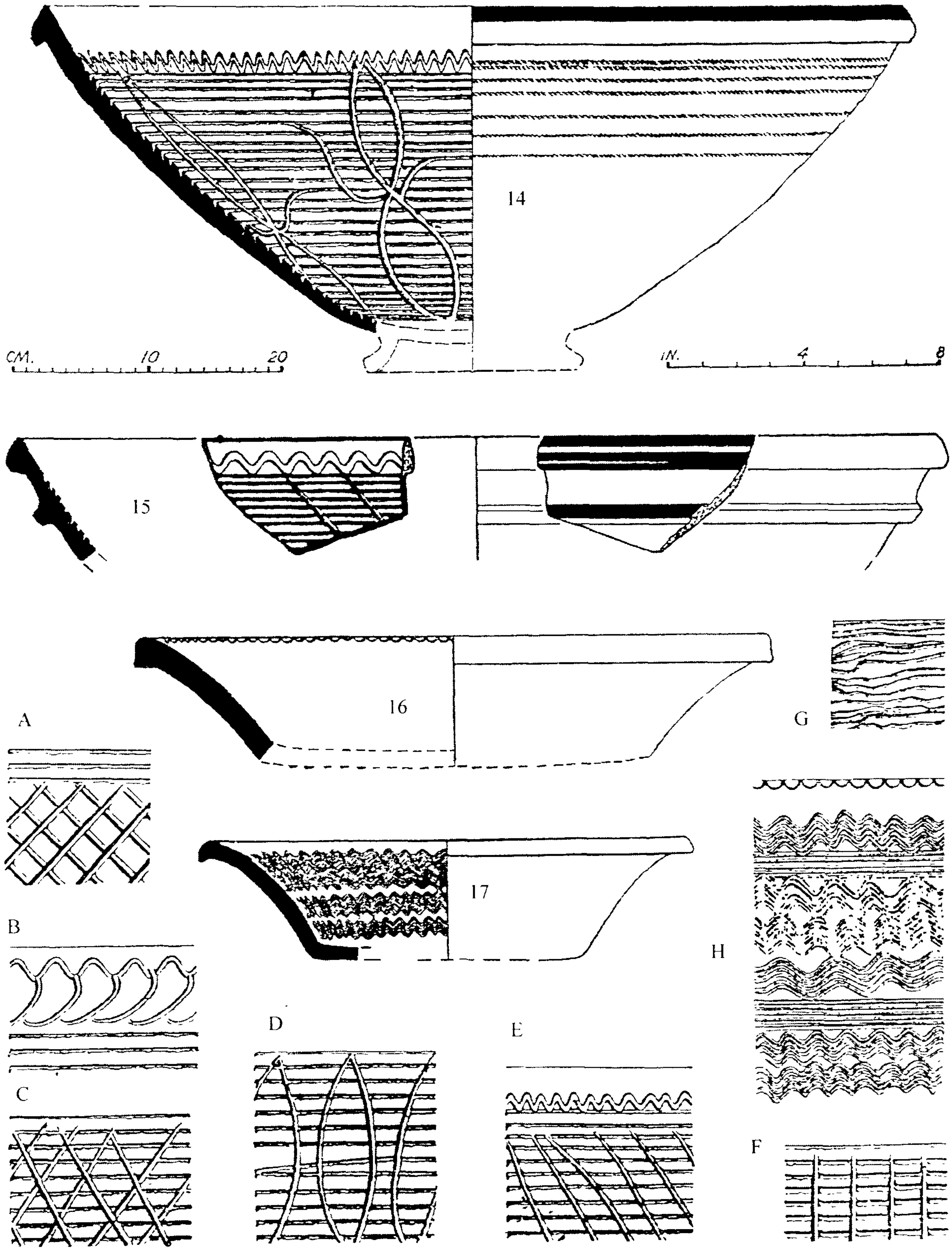


Fig. 24

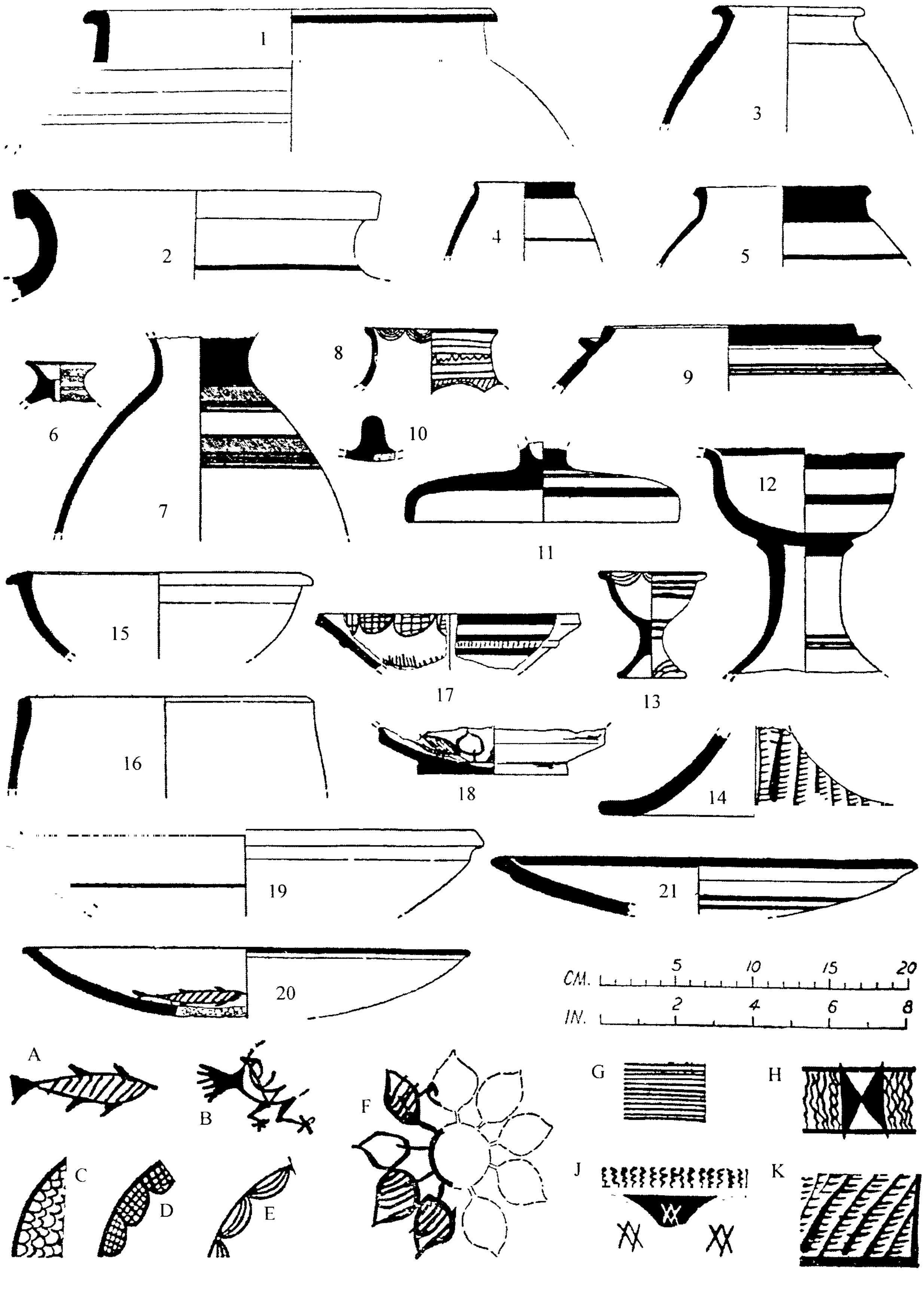

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Fig. 25

THE DESIGN REPERTOIRE

The design-elements were essentially geometric. The simplest of them included : horizontal bands, sometimes as thick as the height of the neck, and in conjunction, covering a portion of the shoulder as well; loops or meanders, inartistically fringed below or enclosed by horizontal bands, rows of dots, diagonally cross-hatched or latticed triangles, panelling of butterfly or opposed triangles by wavy verticals or wavy verticals by horizontal cross-hatched semi-circles and lenticulars cross-hatching converging groups of diagonal lines; chain, both horizontal and vertical and peculiarly the Indus scales. The potter's latitude in space-treatment is seen in the designs consisting basically of joined semi-circles with the intervening space giving the effect of pendant concave-sided triangles. These triangles and the enclosed arches were decorated with different patterns,including criss-cross hatches, meanders, chevrons, oblique lines, lenticulars, spiders, etc. As fillers were employed such motifs as radiating lines ending in solid disks, four petalled flowers, plant-motifs, squares with triangles at the corners - very feebly resembling a Maltese cross and the bucranium in horizontal fashion showing marked conventionalization with minimum of detail. Some of these motifs are parallelled at sites in the Zhob valley and at Amri.

Some of the forms and the painted designs amongst these fabrics show a generic relationship with the Sind-Baluch sites of pre-Harappan vintage, notably Amri, Kot-Diji, pre-defence levels at Harappa, etc. The surface-elaboration of Fabric B closely resembles that of the Wet Wares including Quetta region. M.R. Mughal who had an occasion to study some pottery of early Harappan Period of Kalibangan in 1986 has observed as below :-

"Important points emerging out of this study are that fabric C contains diagnostic short necked Kot-Diji globular vessels with a wide painted band on the neck. A similar type is also included in Fabric 'A'. Fabric D includes Kot-Diji grooved ware and E cups and dishes on stands. Fabric B includes specimens of Kot-Diji forms with multiple wavy lines in relief otherwise known as 'Periano Wet' in Baluchistan. In the assemblage are certain types which have precise parallels with those from Early Harappan sites in Cholistan, Jalilpur, Harappa and Gomal Valley. Buff ware specimens of typical 'Quetta Wet' wares is also included in the fabrics of Kalibangan which are reported only from the water logged levels at Mohenjo-daro during excavations in 1950 and earlier by Mackay but otherwise found at Gomal Valley sites in association with Early Harappan Pottery". It is a matter of opinion[1].

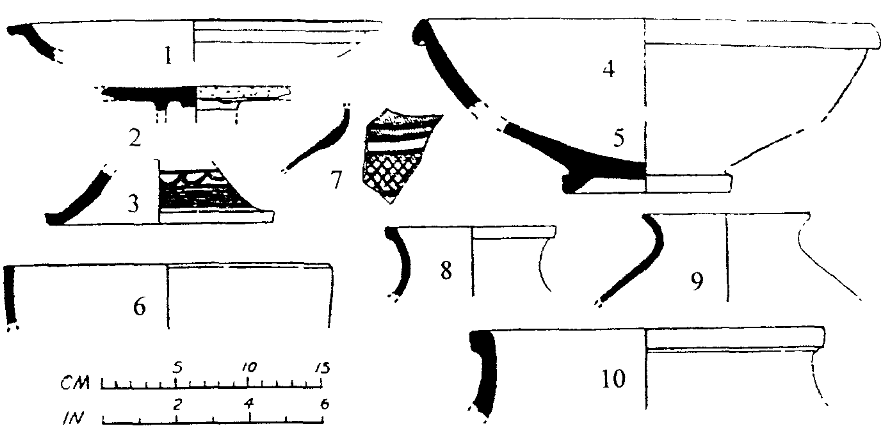


Fig. 26

[1] G.L. Possehl, *Op cit.* (New Delhi, 1999), p. 695 ; M.R. Mughal, "Excavation at Jalilpur", *Pakistan Archaeology*, 8, pp 117-24; M.R Mughal, 'Further Evidence of Early Harappan Culture in the Greater Indus Valley 1971-90', *South Asian Studies* 6 (1990)pp. 175-200.

FABRIC 'A'

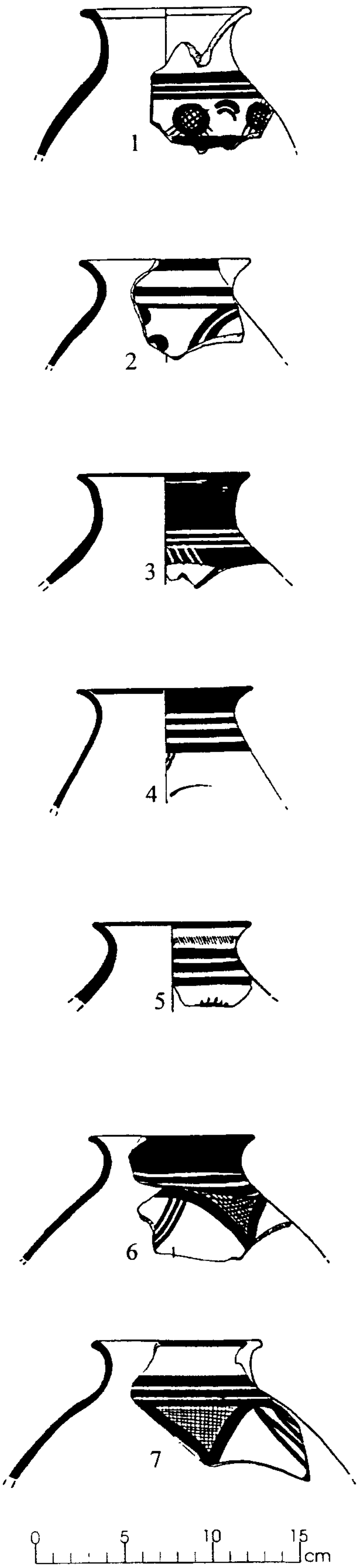


FIG 27

1. Fragment of a pinkish red ware with a featureless rim, short concave neck and oblique shoulder, decorated with black bands on the rim internally and externally, horizontal bands on the shoulder and criss-cross design within two circles and lines emanating at the lower portion and small double semi-circle in-between. Of coarse fabric, showing an oxidized core. From a late level of Period I.

2. Fragment of a vase of red pinkish ware with a splayed-out featureless rim, short concave neck and oblique shoulders, decorated with black horizontal bands and double semi-circles. Of coarse fabric, showing an oxidized core. From a late level of Period I.

3. Fragment of a red ware with an out-turned featureless rim and concave neck, decorated with a thick band on the neck and horizontal bands overlain by oblique white lines on the shoulders. Of medium fabric, showing an oxidized core. From a middle level of Period I.

4. Fragment of a vase of red ware with a featureless rim, concave neck, oblique shoulders, decorated with black and white bands, of medium fabric, showing an oxidized core. From a late level of Period I.

5. Fragment of a vase with a featureless rim concave neck and oblique and black and white dot designs in the shoulder, decorated with black and white horizontal bands on the neck. Of coarse fabric, showing an oxidized core. From an early level of Period I.

6. Fragment of a vase of dark red ware with a splayed-out featureless rim, short neck and oblique shoulders, decorated with horizontal black bands, oblique lines in arches and filled in triangles with black criss-cross design in-between, Of coarse fabric, showing an incomplete oxidized greyish core. From a mid-level of Period I.

7. Fragment of a jar in light pink colour with a featureless out-turned rim, concave neck and oblique shoulders; decorated with horizontal bands, leaf-like design in arches and filled in triangles in-between with black criss-cross designs. Of medium fabric, showing a complete oxidized core. From a mid-level of Period I.

Fig. 27

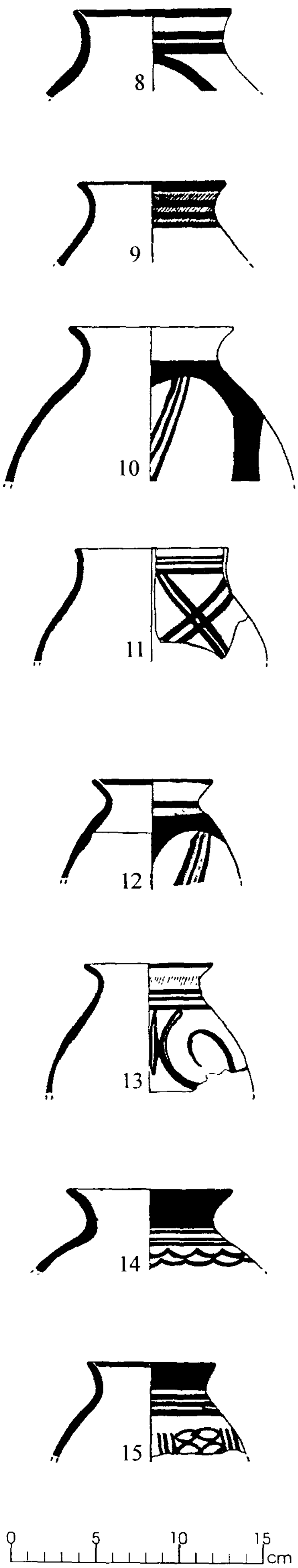


Fig. 27

8. Fragment of a vase of red ware with a splayed-out featureless rim, short concave neck and oblique shoulder, decorated with black horizontal bands and oblique bands, of medium fabric, showing an oxidized core. From an early level of Period I.

9. Fragment of a vase of red ware with an out-turned featureless rim and concave neck, painted with black and white bands, of fine fabric, showing an oxidized core. From a mid-level of Period I.

10. Fragment of a vase of light red ware with an out-turned featureless rim, and concave neck and globular body, decorated in black with thick arch-like design having oblique thin lines, of medium fabric, showing a complete oxidized core. From a mid-level of Period I.

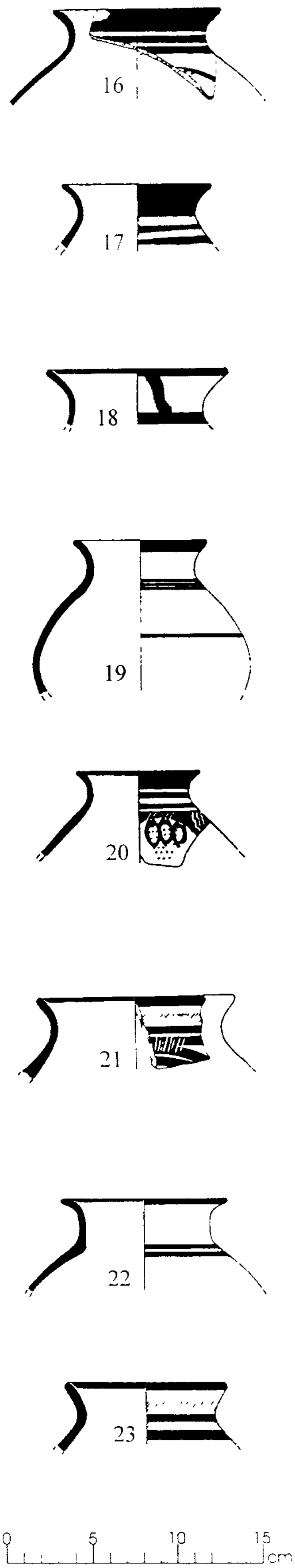
11. Fragment of a vase of red ware with a slightly-out-turned featureless rim, concave neck and ovoid body, decorated with black horizontal bands and a cross made of double lines, of medium fabric, showing an oxidized core. From an early level of Period I.

12. Fragment of a vase of red ware with splayed-out featureless rim, slightly carinated neck and globular body, decorated with black and white horizontal bands and an arch with thin oblique black and white lines, of medium fabric, showing an oxidized core. From an early level of Period I.

13. Fragment of a vase of pink red ware with splayed-out featureless rim and globular body, decorated with black and white, making a pattern of horizontal and vertical lines and loop-like design, of medium fabric, showing an oxidized core. From an early level of Period I.

14. Fragment of a vase of red ware with an out-turned featureless rim, concave neck and oblique shoulder, decorated with a thick band, horizontal bands and double row of zigzag lines in black, of medium fabric, showing an oxidized core. From a mid-level of Period I.

15. Fragment of a vase of red ware with a splayed-out featureless rim, concave neck and oblique with thick and thin horizontal bands, horizontal chains in-between three vertical lines, of medium fabric, showing an oxidized core. From an early level of Period I.



16. Fragment of a vase of red ware with splayed-out featureless rim, concave neck and globular body, decorated with black thick and thin bands and a black slash with white dots, of medium fabric, showing an oxidized core From a mid-level of Period I.

17. Fragment of a vase of red ware with an out-turned featureless rim and oblique body, decorated with thick and thin black bands, of medium fabric, showing an oxidized core. From an early level of Period I.

18. Fragment of a vase of red ware with splayed-out featureless rim, concave neck, decorated with black horizontal and oblique lines, Of coarse fabric, showing an oxidized core. From an early level of Period I.

19. Fragment of a vase of buff colour with an splayed-out featureless rim, short concave neck and globular body, decorated with black bands, of medium fabric, showing an oxidized core. From a late level of Period I.

20. Fragment of a vase of bright red ware with an out-turned featureless rim, concave neck and oblique body, decorated with black and white bands, oblique white strokes, and hanging buds with white dots within an arch below bands, of medium fabric, showing an oxidized core. From an early level of Period I.

21. Fragment of a vase of brownish red ware with an out-turned featureless rim and concave neck, decorated with white and black horizontal bands and semi-circle and oblique white lines, of medium fabric, showing an oxidized core. From a late level of Period I.

22. Fragment of a vase of red colour with an out-turned featureless rim, with a short vertical neck and globular body, decorated with black and white horizontal bands, of medium fabric, showing an oxidized core. From a late level of Period I.

23. Fragment of a vase of red colour with a sharp splayed-out rim and concave neck, painted with black and white horizontal bands, of medium fabric, showing an oxidized core. From a mid-level of Period I.

Fig. 27

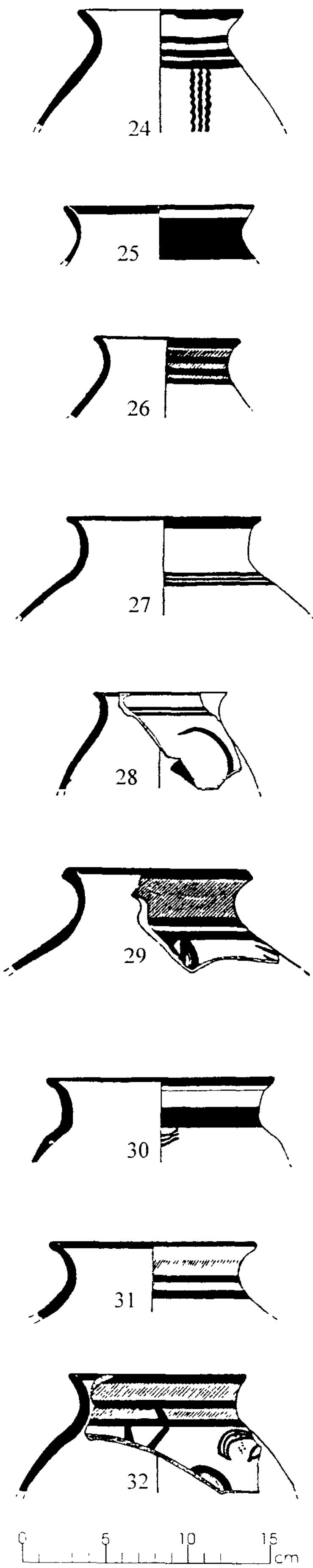


Fig. 27

24. Fragment of a vase of bright red ware with a splayed-out featureless rim and oblique shoulder, decorated with black and white horizontal bands and vertical zigzag lines, of medium fabric, showing an oxidized core. From a mid-level of Period I.

25. Fragment of a vase of brown colour in red ware with an out-turned featureless rim, decorated with a thick black band, of coarse fabric, showing an oxidized core. From an early level of Period I.

26. Fragment of a vase of brownish red ware with an out-turned featureless rim, concave neck and oblique shoulders, painted with black and white thick and thin bands, of medium fabric, showing an oxidized core. From a mid-level of Period I.

27. Fragment of a vase of red ware with out-turned featureless rim, concave neck and oblique body, decorated with thick and thin horizontal black bands, of medium fabric, showing an oxidized core. From a late level of Period I.

28. Fragment of a vase of brownish red ware with thin out-turned featureless rim and globular body, decorated with a frond-like design thinning at the end in black, of medium fabric, showing an oxidized core. From a late level of Period I.

29. Fragment of a vase of dark red ware with an out-turned featureless rim and oblique shoulders, painted with thick white band on the neck and two black bands and a petal-like design in black and white, Of coarse fabric, showing an oxidized core. From a mid-level of Period I.

30. Fragment of a vase of red ware with a thickened out-turned rim, concave neck and convex shoulder, decorated with black thick and thin bands and three oblique wavy lines, of medium fabric, showing an incomplete oxidized core. From a late level of Period I.

31. Fragment of a vase of red ware with an out-turned featureless rim, concave neck and globular body, decorated with black thick and thin horizontal bands, of medium fabric, showing an oxidized core. From an early level of Period I.

32. Fragment of a vase of red ware with an externally turned featureless rim, concave neck and globular body, decorated with black and white horizontal bands and leaf-like design with a bud, of medium

fabric, showing an oxidized core. From a late level of Period I.

33. Fragment of a brownish vase of red ware with an externally turned featureless rim, concave neck and globular body, decorated with black and white horizontal bands and leaf-like design with a bud, of medium fabric, showing an oxidized core. From a late level of Period I.

34. Fragment of a vase of brownish red ware with an out-turned featureless rim, concave neck and oblique shoulder, decorated with black and white horizontal lines below which running arches filled alternately with vertical white and black bands and a pair of buds, painted obliquely and in-between the arches the space is filled by white paint of medium fabric, showing an oxidized core. From an early level of Period I.

35. Fragment of a vase of red ware with an out-turned featureless rim and concave neck, decorated with wavy lines internally on the rim with very thick black band externally, of medium fabric, showing an oxidized core. From a late level of Period I.

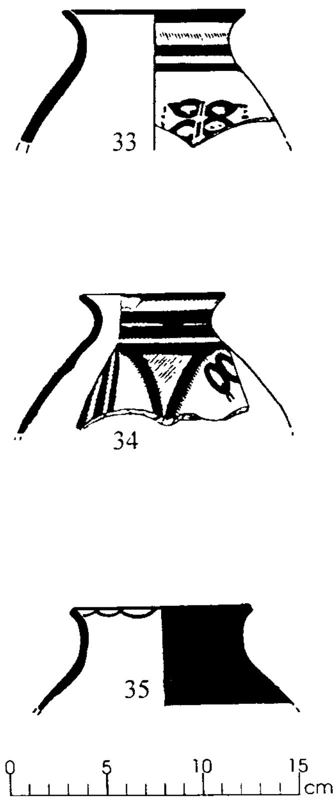


Fig. 27

FIG. 28

1. Fragment of a vase of red ware with an out-turned featureless rim, concave neck and globular body, decorated with a painted thick band on the neck and thin white and black horizontal lines, on the shoulder, of coarse fabric, showing an oxidized core. From a late level of Period I.

2. Fragment of red ware with externally turned rim, concave neck and oblique shoulder, painted in black over the neck and below thin bands, of medium fabric, showing an oxidized core. From an early level of Period I.

3. Fragment of red ware with an out-turned featureless rim, thick concave neck and oblique shoulder, painted with black on the rim and neck, thin and thick bands below, of coarse fabric, showing an oxidized core. From an early level of Period I.

4. Fragment of a vase of brown colour with a slightly out-turned rim, concave neck, decorated with black and white bands on the neck, of medium fabric, showing an oxidized core. From an early level of Period I.

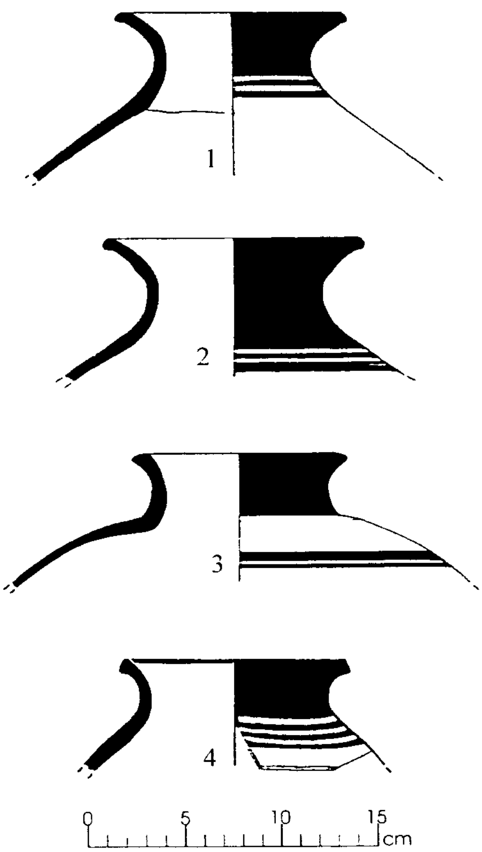
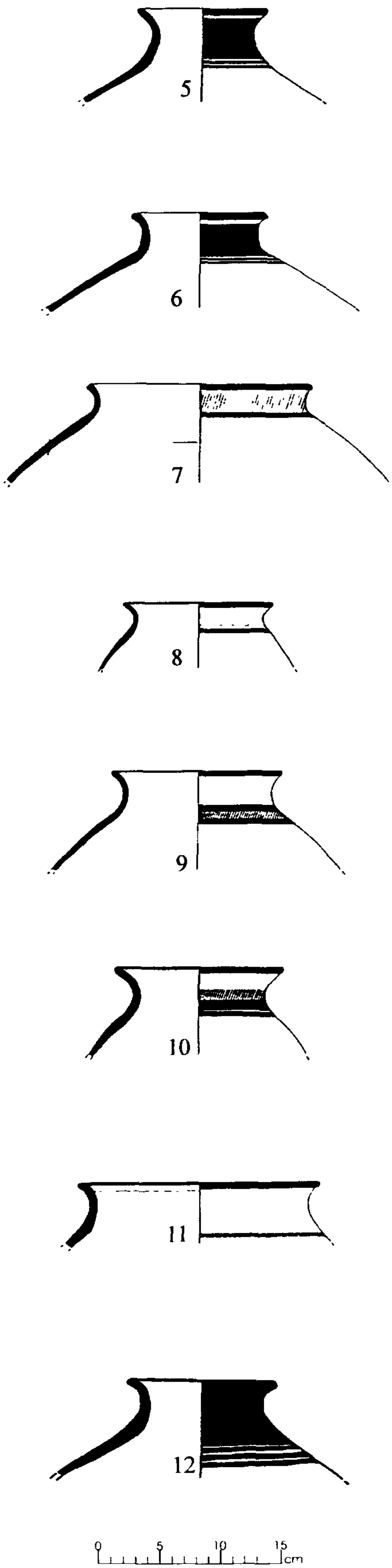


Fig. 28



5. Fragment of a vase of red ware with an out-turned featureless rim, concave neck and oblique shoulders, decorated with very thick black band and thin bands on the neck, of medium fabric, showing an oxidized core. From a late level of Period I.

6. Fragment of red ware with an out-turned thickened rim, concave neck oblique shoulders, painted with black very thick and thin bands, of coarse fabric showing an oxidized core. From a mid-level of Period I.

7. Fragment of a vase of red ware with an out-turned slightly thickened rim, concave neck and oblique shoulders, decorated with white thick band between the black bands on the rim and neck, of coarse fabric, showing an oxidized greyish core. From a mid-level of Period I.

8. Fragment of a vase of red ware with externally out-turned featureless rim, concave neck and oblique shoulders, painted externally with black and white horizontal bands, of medium fabric, showing an oxidized core. From a late level of Period I.

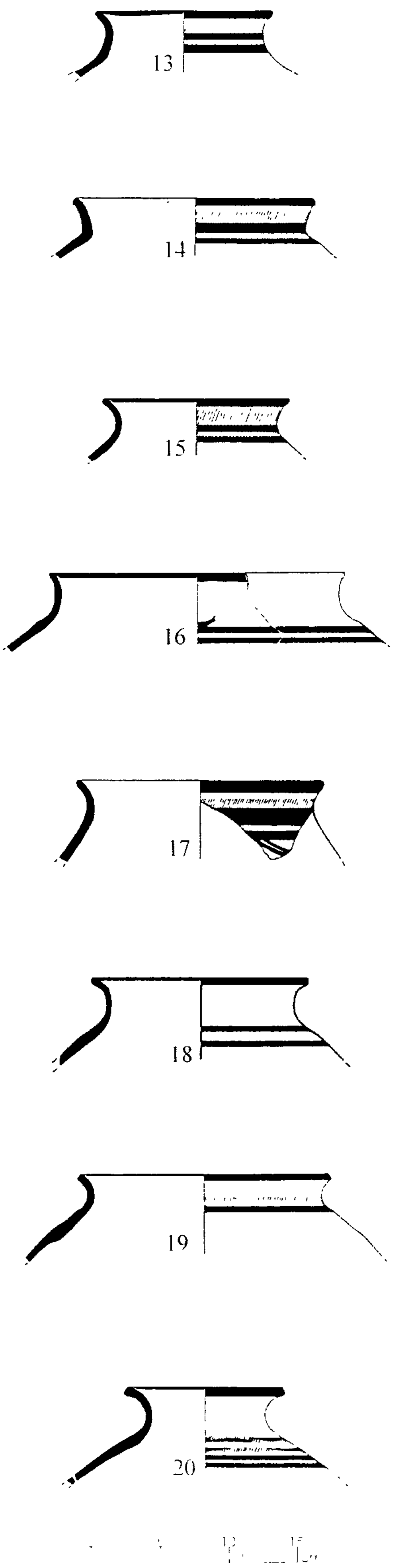
9. Fragment of a vase of red ware with an out-turned featureless rim, concave neck and globular body, decorated with black and white bands, of medium fabric, showing an oxidized core. From a mid-level of Period I.

10. Fragment of a vase of red ware with externally out-turned rim, concave neck and oblique body painted on the neck with white and black bands, of medium fabric, showing an oxidized core. From a late level of Period I.

11. Fragment of a vase of red ware with an out-turned featureless rim, concave neck and globular body, decorated with a black band on the rim, both white band on the internally and externally shoulder, of coarse fabric, showing an oxidized core. From a mid-level of Period I.

12. Fragment of a vase of red ware with slightly out-turned featureless rim concave neck and oblique shoulder, decorated with thick black band and three horizontal bands on the neck, of medium fabric, showing an oxidized core. From a late level of Period I.

Fig. 28



13. Fragment of a vase of red ware with externally out-turned featureless rim, concave neck and oblique shoulder, decorated with black and white bands on the neck, of coarse fabric, showing an oxidized core. From an early level of Period I.

14. Fragment of a vase of brownish red ware with a slightly out-curved, thickened, featureless rim, concave neck and oblique shoulder, decorated with white and black bands on the neck, of coarse fabric, showing an oxidized core. From a late level of Period I.

15. Fragment of a vase of red ware with an out-turned featureless rim, concave neck and globular body, decorated with black and white bands on the neck, of medium fabric, showing an oxidized core. From a mid-level of Period I.

16. Fragment of a brownish red ware with an out-turned featureless rim, concave neck and oblique shoulder, painted with black and white bands on the neck and shoulder, of coarse fabric, showing an oxidized core. From a mid-level of Period I.

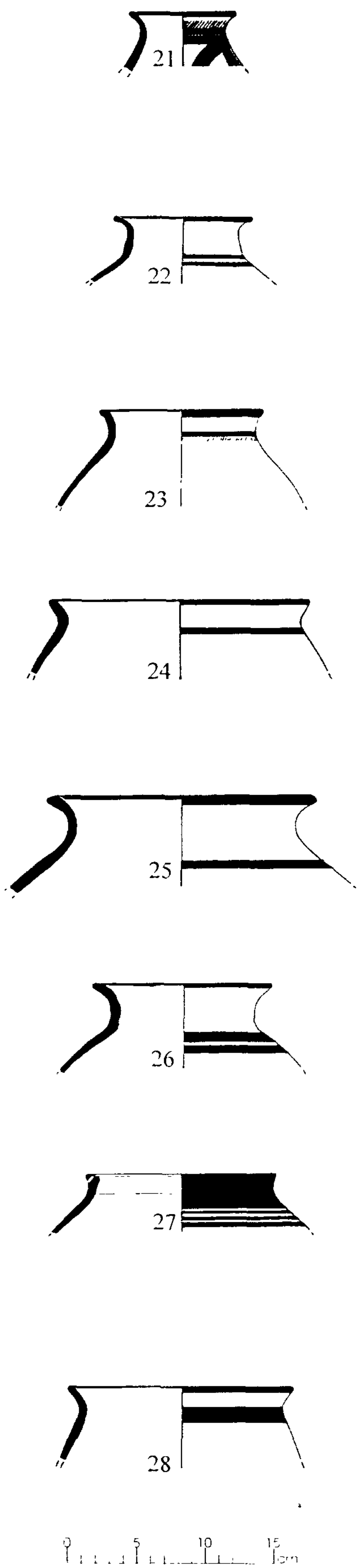
17. Fragment of a vase of red ware with an out-turned thickened featureless rim, concave neck and globular body, decorated with black and white horizontal bands, below which two oblique lines, of coarse fabric, showing an oxidized core. From an early level of Period I.

18. Fragment of a vase of red ware with an out-turned featureless rim, concave neck and globular body, decorated with black bands, of medium fabric, showing an oxidized core. From a mid-level of Period I.

19. Fragment of a vase of red ware with an out-turned thin featureless rim, concave neck and oblique neck and oblique thickened shoulder, painted with black and white bands on the neck, of coarse fabric, showing incomplete oxidized greyish core. From a mid-level of Period I.

20. Fragment of a vase of red ware with an out-turned thickened featureless rim, concave neck and oblique neck and oblique shoulder, painted with black and white bands on the rim and shoulder, of medium fabric, showing an oxidized core. From an early level of Period I.

Fig. 28



21. Fragment of a vase of red ware with a slightly out-turned featureless rim, concave neck, decorated with black and white bands and a semi-circle with oblique black and white lines, of medium fabric, showing an oxidized core. From an early level of Period I.

22. Fragment of a vase of red ware with an out-turned featureless rim, concave neck and oblique shoulders, decorated with black and white bands on the shoulder, of medium fabric, showing an oxidized core. From a late level of Period I.

23. Fragment of a vase of red ware with an out-turned thickened featureless rim, short concave neck and globular body, painted with black and white bands on the rim and the shoulder, of coarse fabric, showing an oxidized core. From an early level of Period I.

24. Fragment of a vase of red ware with an out-turned thickened rim, with a short concave neck and oblique shoulders, painted with black bands on the rim and shoulder, of medium fabric, showing an oxidized core. From a mid-level of Period I.

25. Fragment of a vase of red ware with an out-turned featureless rim, concave neck and oblique body, decorated with horizontal band on the rim and shoulder, of medium fabric, with incomplete oxidized core. From a late level of Period I.

26. Fragment of a vase of red ware with an externally thickened featureless rim, concave neck and oblique body, decorated with black bands on the rim and shoulders, of medium fabric, showing an oxidized core. From a mid-level of Period I.

27. Fragment of a vase of red ware with a nail headed thickened rim and oblique shoulder having a hole in the rim, decorated with a very thick band on the neck and three bands below, of medium fabric, showing an oxidized core. From an early level of Period I.

28. Fragment of a vase of red ware with an out-turned featureless rim, small concave neck and oblique shoulder, decorated with a black thick band on the rim and neck, of medium fabric, showing an oxidized core. From an early level of Period I.

Fig. 28

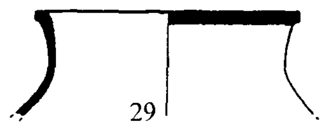


Fig. 28

29. Fragment of a vase of red ware with an out-turned thickened rim with concave neck and oblique body, decorated with black band on the rim, of medium fabric, showing an oxidized core. From a mid-level of Period I.

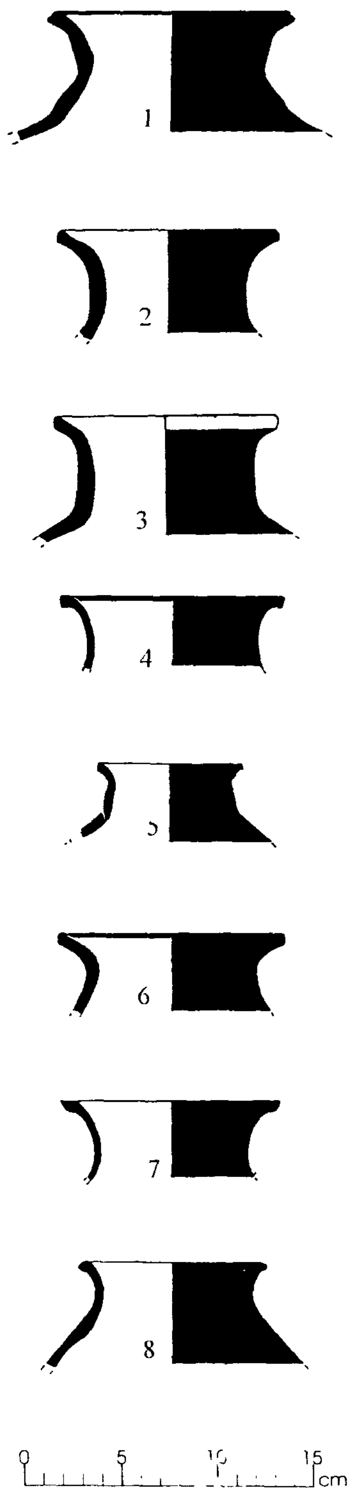


Fig. 29

FIG. 29

1. Fragment of a vase of red ware with an out-turned thickened featureless rim, concave neck and oblique shoulder, painted with black on the rim, neck and shoulder, of coarse fabric, showing an oxidized core. From a late level of Period I.

2. Fragment of a vase of red ware with slightly out-turned thin featureless rim and concave neck, painted on the rim and neck with black, of medium fabric, showing an oxidized core. From a late level of Period I.

3. Fragment of a red ware with an out-turned rim and concave neck, painted with black on the rim. and neck, of coarse fabric, showing an oxidized core. From a late level of Period I.

4. Fragment of a vase of red ware with an out-turned thin rim, incurved neck, painted with black on the rim and the neck, of medium fabric, showing an oxidized core. From a late level of Period I.

5. Fragment of a vase of red ware with slightly out-turned rim and concave neck, painted black on the rim and neck, of medium fabric, showing an oxidized core. From an early level of Period I.

6. Fragment of a vase of red ware with externally out-turned rim and concave neck, painted with black on the rim and neck, of medium fabric, showing an oxidized core. From an early level of Period I.

7. Fragment of a vase of red ware with an out-turned collared rim and concave neck, painted with black on the rim and neck, of medium fabric, showing an oxidized core. From an early level of Period I.

8. Fragment of a vase of red ware with an out-turned rim and concave neck, painted in black on the rim, neck and shoulder, of medium fabric, showing an oxidized core. From a late level of Period I.

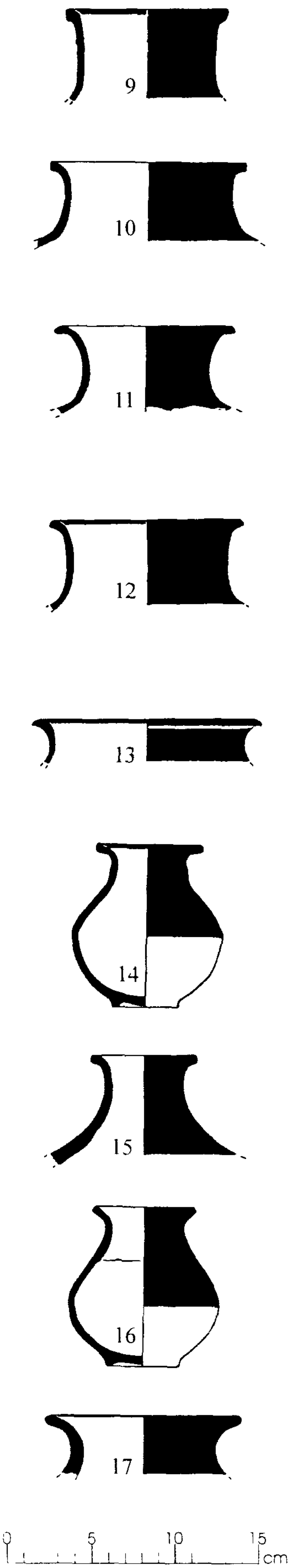


Fig. 29

9. Fragment of a vase of red ware with an externally collared featureless rim and vertical neck, painted in black on the rim and neck, of coarse fabric, showing an oxidized core. From a late level of Period I.

10. Fragment of a vase of red ware with externally out-turned thickened featureless rim and concave neck, painted with black on the rim and neck, of medium fabric, showing an oxidized core. From an early level of Period I.

11. Fragment of a vase of red ware with an out-turned featureless rim and concave neck, painted with black on the rim and neck, of medium fabric, showing an oxidized core. From a late level of Period I.

12. Fragment of a vase of brownish red ware with slightly out-turned thickened featureless rim and concave neck, painted with black on the rim and neck, of medium fabric, showing an oxidized core. From an early level of Period I.

13. Fragment of a vase of brown colour with an out-turned featureless rim and short neck, painted with black thin and thick bands on the rim and neck, of medium fabric, showing an oxidized core. From a late level of Period I.

14. Complete vase of dull red ware with an out-turned featureless rim, short neck and ovoid body with ring base, rim to the upper half of the body painted with black, of medium fabric, showing an oxidized core. From a late level of Period I.

15. Fragmentary vase of red ware with an out-turned featureless rim, concave neck and oblique shoulder, painted with black brown rim to the shoulder, of medium fabric, showing an incomplete oxidized greyish core. From a late level of Period I.

16. Vase of red ware with an out-turned featureless rim, short concave neck, globular body and ring base, painted from rim to the half of the body with black, of medium fabric, showing an oxidized core. From a late level of Period I.

17. Fragment of a vase of red ware with an out-turned featureless rim, concave neck, rim and the neck painted with black, of medium fabric, showing an oxidized core. From a mid-level of Period I.

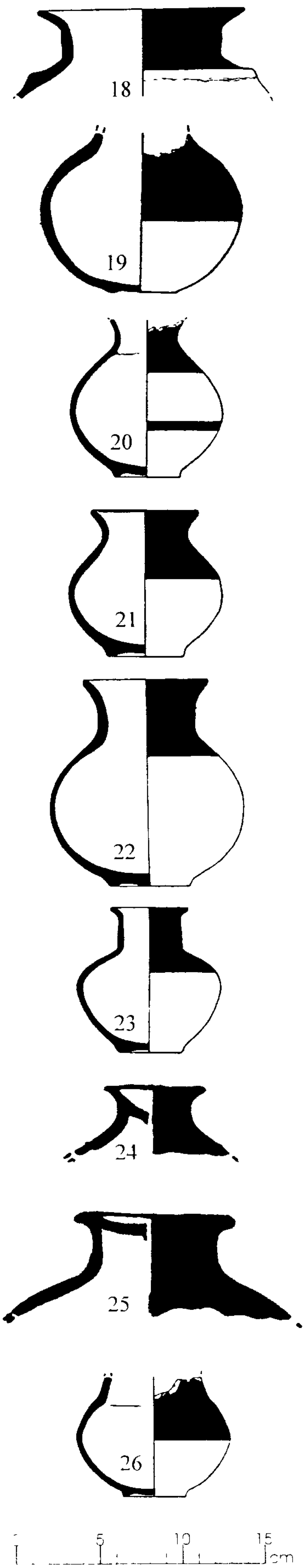


Fig. 29

18. Fragment of a vase of red ware with slightly out-turned and concave neck with a ridge at the shoulder, painted, of medium fabric, showing an oxidized core. From a late level of Period I.

19. Vase of red ware with a broken rim and globular body, painted with thick black upto half of the upper body, of medium fabric, showing an oxidized core. From a late level of Period I.

20. Vase of red ware with a broken rim, short concave neck and globular body with a ring base, painted with black and thin black bands on the body, of medium fabric, showing an oxidized core. From a mid-level of Period I.

21. Complete vase of red ware with slightly out-turned rim, short concave neck and spherical body, painted from rim to the upper half of the body with black colour, of medium fabric, showing an oxidized core. From an early level of Period I.

22. Complete vase of dull red ware with an out-turned featureless rim, concave neck and globular body and ring base, painted with black on rim and neck, of coarse fabric, showing an incomplete oxidized greyish core. From a late level of Period I.

23. Vase of red ware with slightly out-turned broken rim, vertical neck and ovoid body with ring base, painted from rim to the shoulder with black, of medium fabric, showing an oxidized core. From a late level of Period I.

24. Fragment of a closed mouthed jar with a hole in the centre, of brownish red ware, painted with black, of coarse fabric, showing an incomplete oxidized greyish core. From an early level of Period I.

25. Fragment of a red ware jar with a closed mouth and a hole in the centre, painted with black on sides, of coarse fabric, showing an oxidized core. From a late level of Period I.

26. Small vase of light brown colour with a broken rim, bulbous body with a slight carination and ring base, half of the body painted with black, of medium fabric, showing an oxidized core. From a late level of Period I.

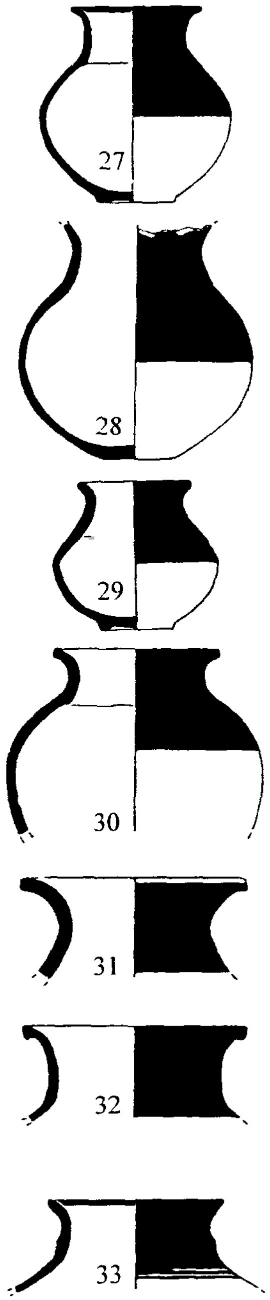


Fig. 29

27. Complete vase of red ware with partly broken out-turned featureless rim, globular body and broken base, painted with black in the upper body, of coarse fabric, showing an oxidized core. From a late level of Period I.

28. Vase of dull red ware with broken rim, painted with black in the upper body, of coarse fabric, showing an oxidized core. From a late level of Period I.

29. Vase of dark brown colour with slightly out-turned base, concave neck and spherical body with ring base, the upper half of the body painted, of coarse fabric, showing an oxidized core. From a late level of Period I.

30. Vase of red ware with an out-turned featureless rim and short concave neck with ovoid body, painted upto the shoulder, burnished, of medium fabric, showing an oxidized core. From an early level of Period I.

31. Fragment of a vase of red ware with an out-turned featureless rim and concave neck, painted upto the shoulder, of medium fabric, showing an oxidized core. From an early level of Period I.

32. Vase of red ware with an externally thickened collard rim and concave neck, painted upto the shoulder, of medium fabric, showing an oxidized core. From a late level of Period I.

33. Vase of red ware with a slightly out-turned featureless rim and concave neck, neck painted with thick and thin black bands, of medium fabric, showing an oxidized core. From an early level of Period I.

FIG. 30

1. Fragment of a vase of red ware with a out-turned featureless rim, concave neck and oblique shoulder, painted with black and white horizontal bands and criss-cross design below. Of medium fabric, showing an oxidized core. From an early level of Period I.

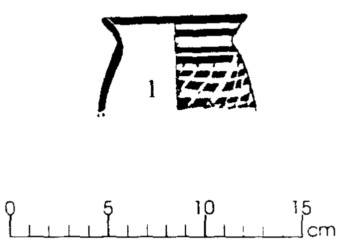
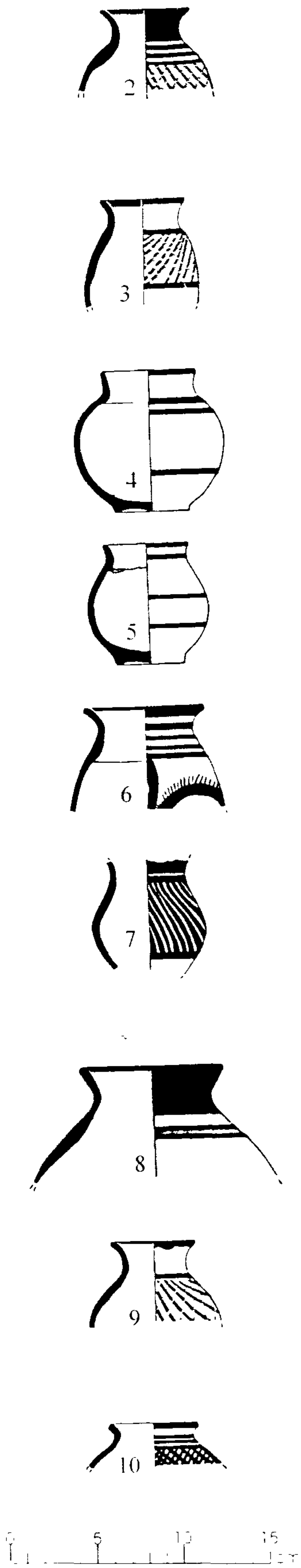


Fig. 30



2. Fragment of a vase of red ware with slightly out-turned featureless rim and concave neck, painted with black and white bands, of medium fabric, showing an oxidized core. From an early level of Period I.

3. Fragment of small vase of brown colour with an out-turned featureless rim and short concave neck, painted with black and white lines making criss-cross design on the shoulder, of medium fabric, showing an oxidized core. From a late level of Period I.

4. Complete vase of red ware with slightly out-turned featureless broken rim and ring base, painted with black bands, of coarse fabric, showing an oxidized core. From a late level of Period I.

5. Vase of red ware with an out-turned thickened rim and globular body with ring base, painted with black horizontal bands, of coarse fabric, showing incomplete oxidized core. From a late level of Period I.

6. Vase of red ware with an out-turned rim and ovoid body, painted with black semi-circular bands and rays emanating from one of the semi-circles, of medium fabric, showing an oxidized core. From an early level of Period I

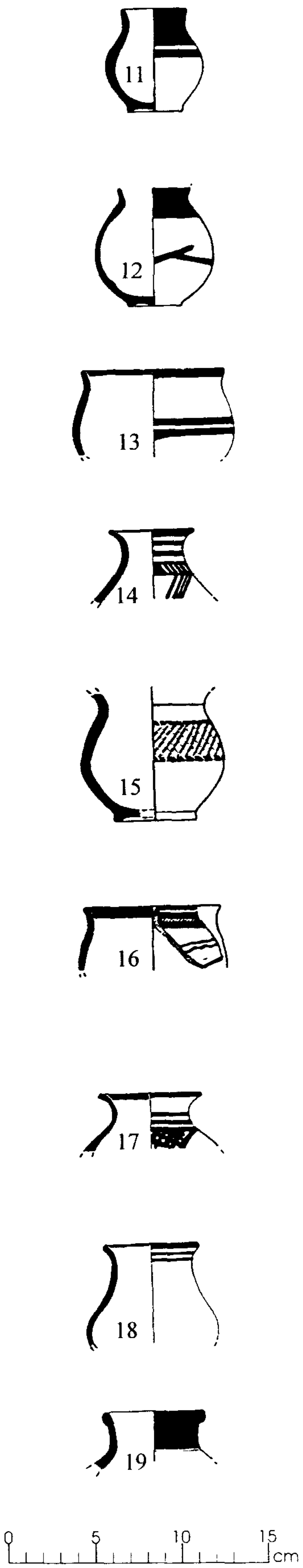
7. Fragment of a vase of red ware with a broken rim and spherical body, painted with black and white oblique lines within horizontal bands, of coarse fabric, showing an oxidized core. From an early level of Period I.

8. Fragment of a vase of red ware with an out-turned featureless rim, concave neck and oblique body, painted with thick black and white bands, of medium fabric, showing an oxidized core. From an early level of Period I.

9. Fragment of a vase of red ware with an out-turned rim and globular body, painted with black and white criss-cross design on the body, of fine fabric, showing an oxidized core. From a late level of Period I.

10. Fragment of a vase of red ware with a flanged rim and oblique body, painted with black horizontal bands and criss-cross design, of coarse fabric, showing an oxidized core. From a late level of Period I.

Fig. 30



11. Vase of dull red ware with slightly out-turned featureless rim and spherical body with ring base, painted with thick and thin black bands, of medium fabric, showing an oxidized core. From a mid-level of Period I.

12. Vase of red ware with broken rim and spherical body with ring base, painted on the neck with thick black band and on the lower part thin broken band, of medium fabric, showing an oxidized core. From a late level of Period I.

13. Fragment of a vase of red ware with a slightly out-turned rim and ovoid body, painted with black bands, of medium fabric, showing an oxidized core. From an early level of Period I.

14. Fragment of a vase of red ware with externally out-turned internally luted rim and concave neck, painted with black and white horizontal bands and oblique lines, of coarse fabric, showing an oxidized core. From a late level of Period I.

15. Fragment of a vase of dull red ware with a broken rim, ovoid body with a ring base, painted with black and white criss-cross pattern within two horizontal bands, fabric showing an oxidized core. From a mid-level of Period I.

16. Vase of red ware with externally out-turned featureless rim, painted with black and white bands and below two white wavy lines, of coarse fabric, showing an oxidized core. From a mid-level of Period I.

17. Fragment of a small vase of red ware with a flanged rim and bulbus body, painted with black horizontal bands and criss-cross design, internally painted rim, of medium fabric, showing an oxidized core. From a late level of Period I.

18. Fragment of a vase of cream colour with slightly out-turned featureless rim, ovoid body, painted with black bands, or coarse fabric showing an oxidized core. From an early level of Period I.

19. Fragment of a small vase of red ware with a collared rim and concave neck, painted with thick black band on the rim and neck, of coarse fabric, showing an oxidized core. From a late level of Period I.

Fig. 30

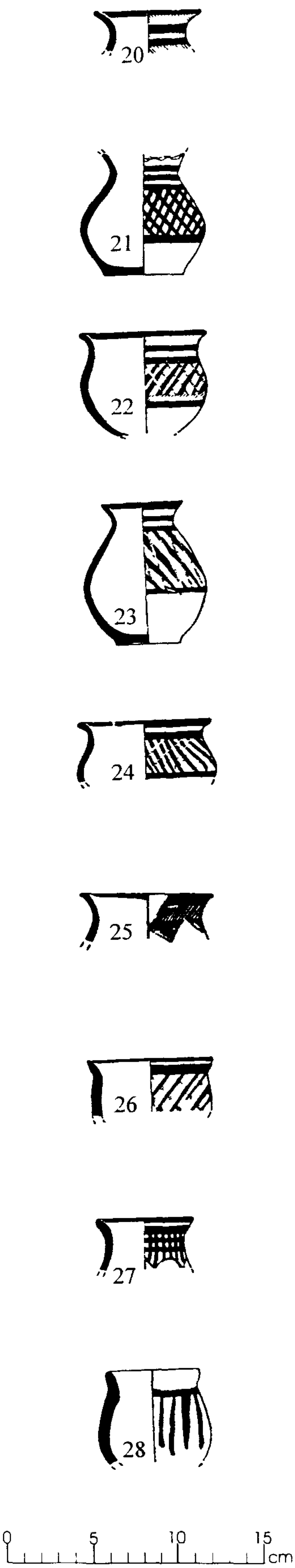


Fig. 30

20. Small vase of red ware with slightly out-turned featureless rim and concave neck painted with black and white horizontal bands, of coarse fabric, showing an oxidized core. From a mid-level of Period I.

21. Small vase of red ware with broken rim, spherical body and ring base, painted with black criss-cross design under three horizontal bands, of medium fabric, showing an oxidized core. From a late level of Period I.

22. Vase of red ware with an out-turned featureless rim and globular body, painted with black and white bands and a criss-cross design in-between, of coarse fabric, showing an oxidized core. From a mid-level of Period I.

23. Small vase of red ware with an out-turned featureless broken rim and spherical body, painted with black and white, oblique lines within bands making criss-cross design, of coarse fabric, showing an oxidized core. From a mid-level of Period I.

24. Fragment of a small vase of red ware with slightly out-turned rim, patined with black and white horizontal bands and criss-cross design within bands, of medium fabric, showing an oxidized core. From a mid-level of Period I.

25. Fragment of a small vase of red ware with an out-turned featureless rim, painted with black and white bands, of coarse fabric, showing an oxidized core. From an early level of Period I.

26. Fragment of a small vase of red ware with a slightly out-turned featureless rim, painted with black and white, making criss-cross design, of medium fabric, showing an oxidized core. From a late level of Period I.

27. Fragment of a vase of red ware with slightly out-turned featureless rim and bulbous body, painted with black making a grid pattern, of coarse fabric, showing an oxidized core. From a late level of Period I.

28. Fragment of a vase of red ware with slightly out-turned featureless rim, ovoid body painted with thick and thin black bands, horizontal and vertical, of coarse fabric, showing an oxidized core. From an early level of Period I.

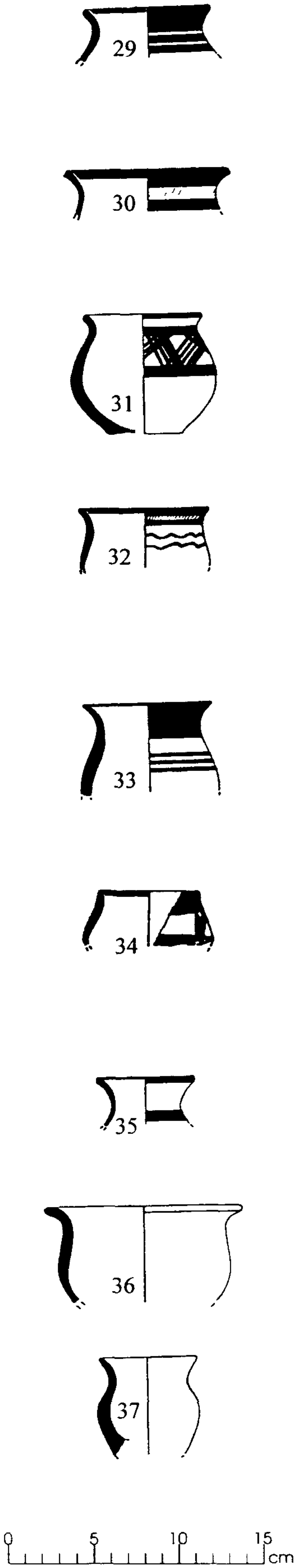


Fig. 30

29. Fragment of a vase with out-turned featureless rim, painted with thick and thin black bands, of coarse fabric, showing an oxidized core. From an early level of Period I.

30. Fragment of a vase of red ware with an out-turned thickened featureless rim and concave neck, painted with whitel band within two black bands, of medium fabric, showing an oxidized core. From a late level of Period I.

31. Fragment of a small vase of red ware with an out-turned thickened featureless rim, globular body, painted with black, of medium fabric, showing an oxidized core. From a late level of Period I.

32. Fragment of a small vase of red ware with a slightly out-turned rim and concave neck, painted with two white wavy lines under black and white bands and internally painted on rim with one horizontal band, of medium fabric, showing an oxidized core. From an early level of Period I.

33. Fragment of a vase of dull red ware with an out-turned flaring featureless rim, painted on the neck with black thick band and three thin bands on the shoulder, of medium fabric, showing an oxidized core. From an early level of Period I.

34. Fragment of a small vase of red ware with a featureless rim and globular body, painted with black strokes within horizontal bands, of medium fabric, showing an oxidized core. From a mid-level of Period I.

35. Fragment of a small vase of red ware with a slightly out-turned thickened rim, and concave neck, painted with two black bands on the rim and shoulder, of fine fabric, showing an oxidized core. From an early level of Period I.

36. Fragment of a bowl of dull red ware with an out-turned flaring rim, concave neck, of medium fabric, showing an oxidized core. From a late level of Period I.

37. Miniature vase of red ware with slightly out-turned featureless rim, concave neck and spherical body, of coarse fabric, showing an oxidized core. From a late level of Period I.

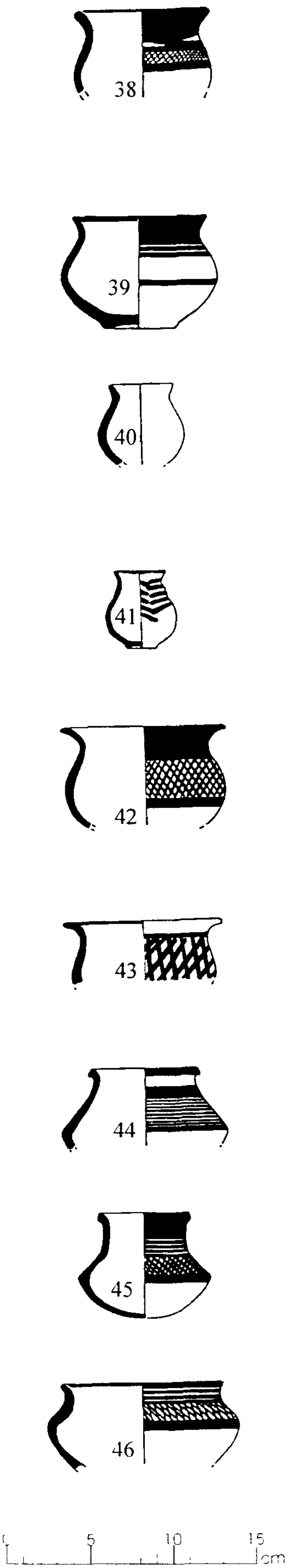


Fig. 30

38. Small vase of red ware with an out-turned flanged featureless rim and concave neck painted with thick black band on the neck and criss-cross design within two horizontal bands on the shoulder, of coarse fabric, showing an oxidized core. From an early level of Period I.

39. Small pot of red ware with a slightly out-turned featureless rim, globular body with ring base, painted with thick and thin black bands and two thin white bands, of medium fabric, showing an oxidized core. From an early level of Period I.

40. Fragment of a miniature vase of red ware with featureless rim, small concave neck and globular body, of medium fabric, showing an oxidized core. From a mid-level of Period of I.

41. Miniature vase of red ware with a slightly out-turned featureless rim, concave neck, spherical body with ring base, painted with horizontal black bands, of medium fabric, showing an oxidized core. From a late level of Period I.

42. Vase of dark dull red ware with an out-turned flanged rim and globular body, painted with criss-cross design in-between two black bands, of medium fabric, showing an oxidized core. From an early level of Period I.

43. Fragment of a vase of red ware with an out-turned featureless rim, painted with black criss-cross design, of medium fabric, showing an oxidized core. From a late level of Period I.

44. Fragment of a pot of dull red ware with an externally thickened rim and oblique sides having a sharp carinated profile, painted with thick and thin bands, of medium fabric, showing an oxidized core. From a late level of Period I.

45. Small pot of dull red ware with slightly out-turned thickened criss-cross designed rim and carinated profile with rounded base, painted with black bands, of coarse fabric, showing an oxidized core. From an early level of Period I.

46. Fragment of a pot of brown colour with an out-turned featureless rim and short concave neck, painted with black lattice-like pattern within groups of bands, of coarse fabric, showing an incomplete oxidized greyish core. From a late level of Period I.

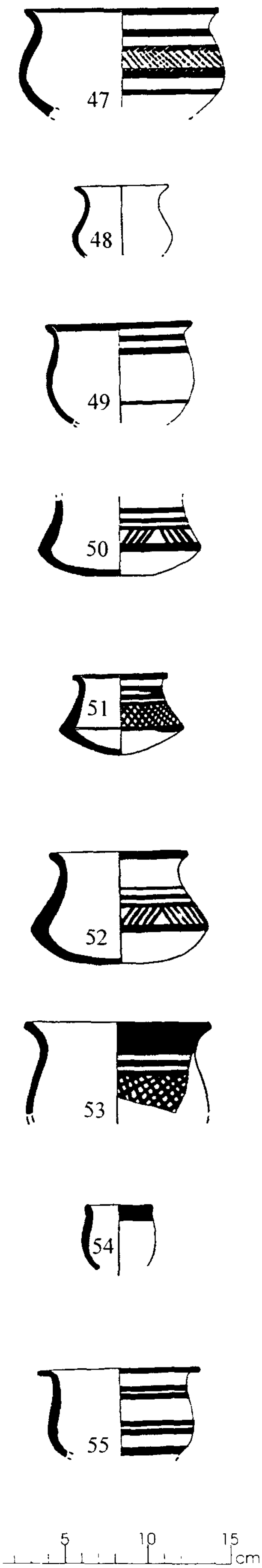


Fig. 30

47. Fragment of a small pot of red ware with an out-turned featureless rim and bulbous body, painted with black and white oblique lattice design within two bands, of medium fabric, showing an oxidized core. From an early level of Period I.

48. Fragment of a miniature vase of red ware with an out-turned featureless rim, short concave neck and bulbous body, of medium fabric, showing an oxidized core. From a late level of Period I.

49. Fragment of a pot of red ware with a slightly out-turned featureless rim and spherical body painted with black bands, of coarse fabric, showing an oxidized core. From an early level of Period I.

50. Fragment of a vase of red ware with almost straight sides and shap carinated flat base, painted with oblique lines in groups within black bands, of coarse fabric, showing an oxidized core. From a late level of Period I.

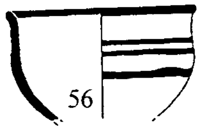
51. Vase of red ware with an out-turned featureless rim, carinated profile, round base, painted with black criss-cross design and black bands, of medium fabric, showing an oxidized core. From a late level of Period I.

52. Small vase of red ware with slightly out-turned featureless rim and globular body, painted with black horizontal bands and criss-cross with dot inside a round space, of medium fabric, showing an oxidized core. From a late level of Period I.

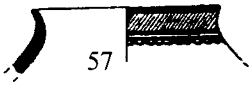
53. Fragment of a vase of red ware with an out-turned thickened featureless rim, painted with thick and thin black and white bands and criss-cross design, of medium fabric, showing an oxidized core. From a late level of Period I.

54. Fragment of a miniature vase of red ware with slightly out-turned featureless rim and bulbous body, painted with thick black band, of medium fabric, showing an oxidized core. From an early level of Period I.

55. Fragment of a pot of red ware with an externally out-turned, flanged, featureless rim and almost straight sides, painted with black horizontal bands, of medium fabric, showing an oxidized core. From a late level of Period I.



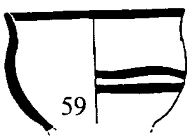
56. Fragment of a pot of red ware with an out-turned thickened featureless rim and spherical body, painted with black horizontal bands, of medium fabric, showing an oxidized core. From a late level of Period I.



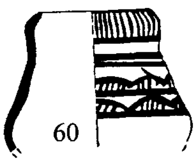
57. Fragment of a vase of red ware with an out-turned featureless rim, painted with black and white bands followed by a wavy line, of medium fabric, showing an oxidized core. From a late level of Period I.



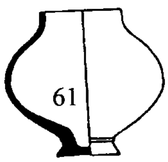
58. Fragment of a pot of red ware with an out-turned featureless rim and oblique sides with a carination on the profile, painted with black criss-cross design within two bands. From a late level of Period I.



59. Fragment of a pot of red ware with slightly out-turned featureless rim and bulbous body, painted with black bands, of medium fabric, showing an oxidized core. From a late level of Period I.



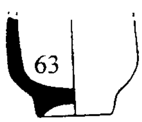
60. Fragment of a pot of red ware with an internally turned featureless rim and bell shaped body, painted with black vertical lines in the top and within horizontal bands loops panelled by vertical lines, of medium fabric, showing an oxidized core. From a late level of Period I.



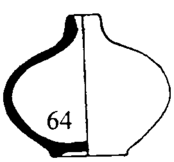
61. Complete vase of red ware with a featureless rim, bulbous body and footed base, of coarse fabric, showing an oxidized core. From a late level of Period I.



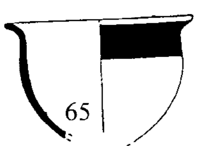
62. Fragment of a miniature vase of dull red ware with a narrow mouthed and spherical sides, painted with black bands, of coarse fabric, showing an oxidized core. From a late level of Period I.



63. Base of pot of a red ware with straight sides and footed base, of medium fabric, showing an oxidized core. From a late level of Period I.



64. Small pot of dull red ware with a narrow mouthed featureless rim, globular body with ring base, of coarse fabric, showing an oxidized core. From a late level of Period I.



65. Fragment of a pot of dull red ware with an out-turned flaring featureless rim and spherical body, painted with black band on the neck, of medium fabric, showing an oxidized core. From an early level of Period I.

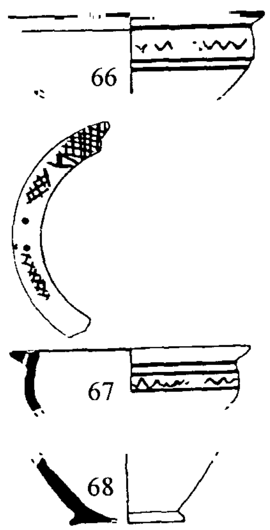


Fig. 30

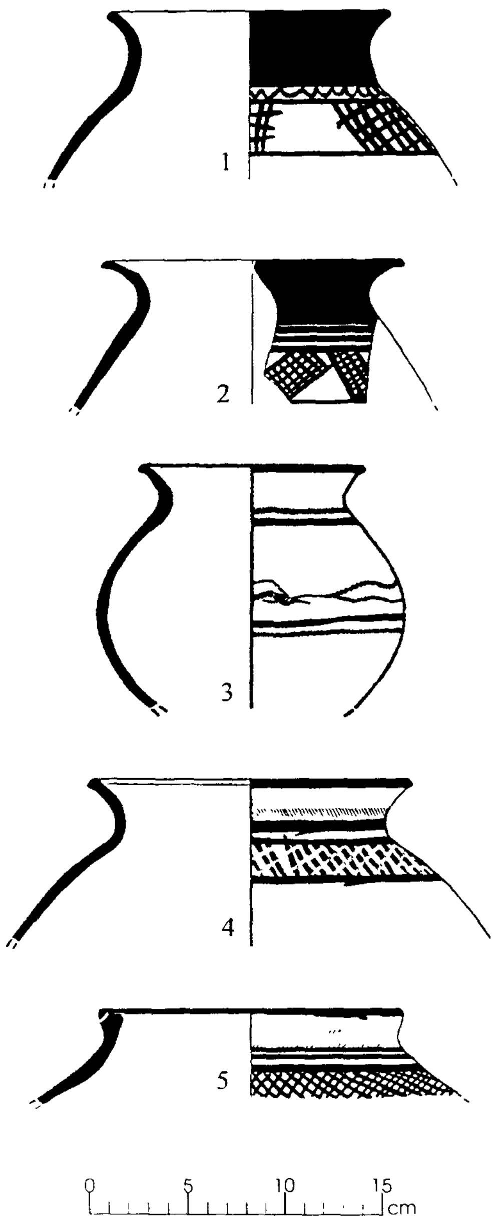


Fig. 31

66. Pot of red ware with an out-turned featureless rim marked internally by a ridge, painted with black showing wavy lines within a panel of double horizontal bands, of medium fabric, showing an oxidized core. From a late level of Period I.

67. Fragment of a small vase of red ware with a slightly out-turned featureless rim and oblique sides, painted with thick band on the neck and thin band on the body, of medium fabric, showing an oxidized core. From a mid-level of Period I.

68. Fragment of a base of red ware with slanting sides and footed base, of medium fabric, showing an oxidized core. From a late level of Period I.

FIG. 31

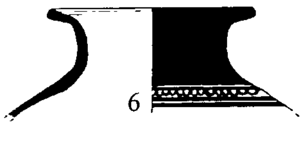
1. Fragment of a jar of red ware with an out-turned featureless rim, concave neck and oblique shoulders, painted with black thick bands on the neck, wavy lines and panels of criss-cross design between the bands, of coarse fabric, showing an oxidized core. From a late level of Period I.

2. Fragment of a jar of red ware with an out-turned, flanged, featureless rim with concave neck and oblique shoulder, decorated with thick and thin black bands on the neck and blocks of criss-cross design, of medium fabric, showing an incomplete oxidized core. From a mid-level of Period I.

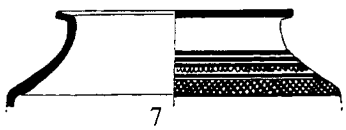
3. Broken pot of red ware with slightly out-turned featureless rim, concave neck and globular body, painted with black and white horizontal bands and continuous chain design, of coarse fabric, showing an oxidized core. From a mid-level of Period I.

4. Fragment of a jar of light brown colour with an out-turned featureless rim, short concave neck and oblique body, painted with black and white bands and criss-cross design under the bands, of medium fabric, showing an oxidized core. From a late level of Period I.

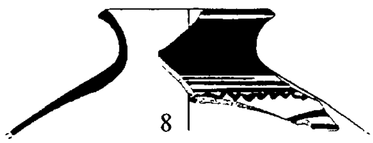
5. Fragment of a jar of brown colour with splayed-out thickened, bud-shaped, grooved rim having a hole on rim, painted with black and white bands, criss-cross design below bands, of medium fabric, showing an oxidized core. From a late level of Period I.



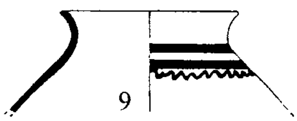
6. Fragment of a jar of red ware with an out-turned thickened flanged rim, concave neck and oblique body, painted with black on the neck, wavy lines and bands under thick band, of medium fabric, showing an oxidized core. From a late level of Period I.



7. Fragment of a carinated vase of red ware with externally splayed-out rim and oblique body, painted with black bands, wavy lines, panel of criss-cross design below the bands, of medium fabric, showing an oxidized core. From a late level of Period I.



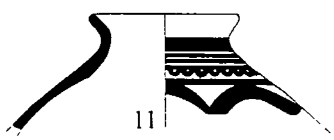
8. Fragment of a jar of red ware with an out-turned thickened featureless rim, painted with black bands on the neck, wavy line and thin bands, of coarse fabric, showing an oxidized core. From a late level of Period I.



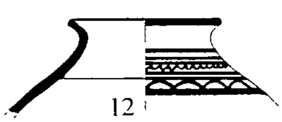
9. Fragment of a vase of light brown colour with slightly out-turned featureless rim and oblique body, the shoulder painted with black horizontal bands and wavy lines, of coarse fabric, showing an oxidized core. From a late level of Period I.



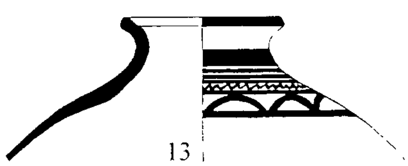
10. Fragment of a jar of red ware with an out-turned featureless rim, concave neck and globular shoulder, painted with thick and thin black bands and wavy lines on the neck, of medium fabric, showing an oxidized core. From an early level of Period I.



11. Fragment of a jar of brown colour with an out-turned featureless rim and globular body, painted with black thick and thin bands, continuous loops followed by horizontal line, and semi-circle designs, of coarse fabric, showing an oxidized core. From a late level of Period I.



12. Fragment of a jar of red ware with an out-turned featureless rim and globular shoulder, painted with black bands, wavy lines and a panel of a series of semi-circles, of medium fabric, showing an oxidized core. From a mid-level of Period I.



13. Fragment of a jar of red ware with an out-turned featureless rim and globular body, painted with black thick and thin bands, wavy lines and a series of semi-circles, of medium fabric, showing an oxidized core. From a mid-level of Period I.

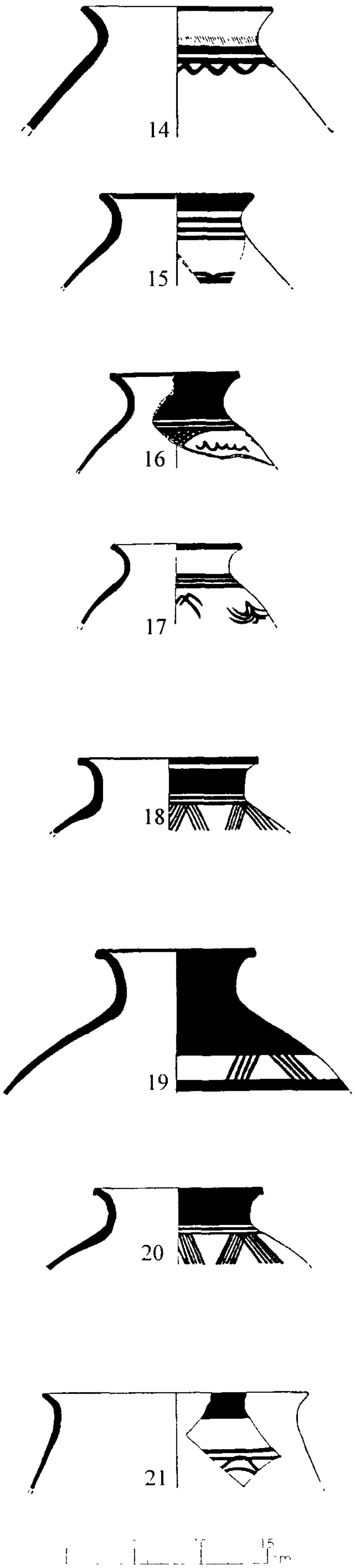


Fig. 31

14. Fragment of a jar of red ware with an externally flaring rim and globular body, painted with black and white bands and wavy lines below the bands, of coarse fabric, showing an oxidized core. From a late level of Period I.

15. Fragment of a jar of red ware with slightly out-turned featureless rim and oblique body, painted with black and white bands on the neck, shoulder and semi-circles of medium fabric, showing an oxidized core. From a late level of Period I.

16. Fragment of a jar of red ware with an out-turned featureless rim and globular body, painted with thick and thin black bands and below criss-cross design with wavy lines, of coarse fabric, showing an oxidized core. From a late level of Period I.

17. Fragment of a jar of red ware with an out-turned slightly thickened featureless rim and oblique body, painted with black on the rim and three horizontal lines over the shoulder and below stylized bird-like design, of medium fabric, showing an oxidized core. From a late level of Period I.

18. Fragment of a jar of red ware with an out-turned featureless rim, concave neck and oblique body, painted with thick and thin bands on the neck and panel of oblique lines, of medium fabric, showing an oxidized core. From an early level of Period I.

19. Fragment of a jar of red ware with an externally thickened featureless rim, concave neck and globular body, painted with thick black band from top upto the shoulder, group of oblique lines followed by horizontal lines, of coarse fabric, showing an oxidized core. From a mid-level of Period I.

20. Fragment of a jar of red ware with slightly out-turned featureless rim, concave neck and globular shoulder, painted with thick and thin black band on the neck and groups of converging lines below the bands, of medium fabric, showing an oxidized core. From a late level of Period I.

21. Fragment of a jar of red ware with slightly out-turned featureless rim and oblique shoulders, painted with thick black band on the rim and thin bands on the shoulder with double loops, of medium fabric, showing an oxidized core. From a late level of Period I.

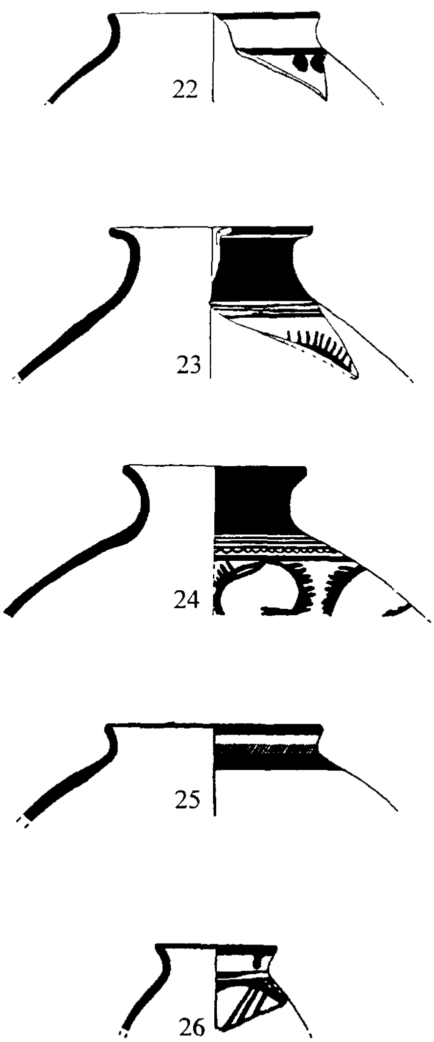


Fig. 31

22. Fragment of a jar of red ware with slightly out-turned featureless rim and oblique shoulders, painted with black bands and two dots, of coarse fabric, showing an incomplete oxidized greyish core. From a late level of Period I.

23. Fragment of a jar of brown colour with a flaring featureless rim and oblique shoulders and globular body, painted with thick and thin black bands and partial sun-like design on the shoulder, of medium fabric, showing an oxidized core. From an early level of Period I.

24. Big jar of brown colour with slightly out-turned thickened featureless rim and globular body, painted with thick and thin black wavy line and roughly drawn rayed circles below the bands, of coarse of medium fabric, showing an oxidized core. From a late level of Period I.

25. Fragment of a jar of red ware with an out-turned featureless rim and oblique sides painted with black and white horizontal bands, of coarse fabric, showing an oxidized core. From an early level of Period I.

26. Fragment of a jar of red ware with an out-turned featureless rim and oblique sides, painted with black horizontal bands, followed by arches filled by a group of oblique lines and triangular space between the arches filled by criss-cross design, of coarse fabric, showing an oxidized core. From a late level of Period I.

FIG. 32

1. Fragment of a jar of red ware with broken rim and having globular body, painted with black thin bands, of fine fabric, showing an oxidized core. From a mid-level of Period I.

2. Fragment of a jar of red ware with oblique body and broken rim, painted with black bands, of medium fabric, showing an oxidized core. From a late level of Period I.

3. Fragment of a jar of red ware with a globular body, painted with black thick and thin bands, of medium fabric, showing an oxidized core. From a late level of Period I.

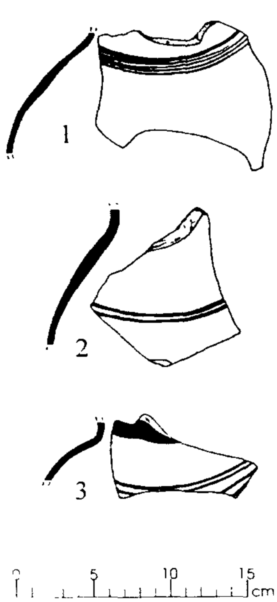


Fig. 32

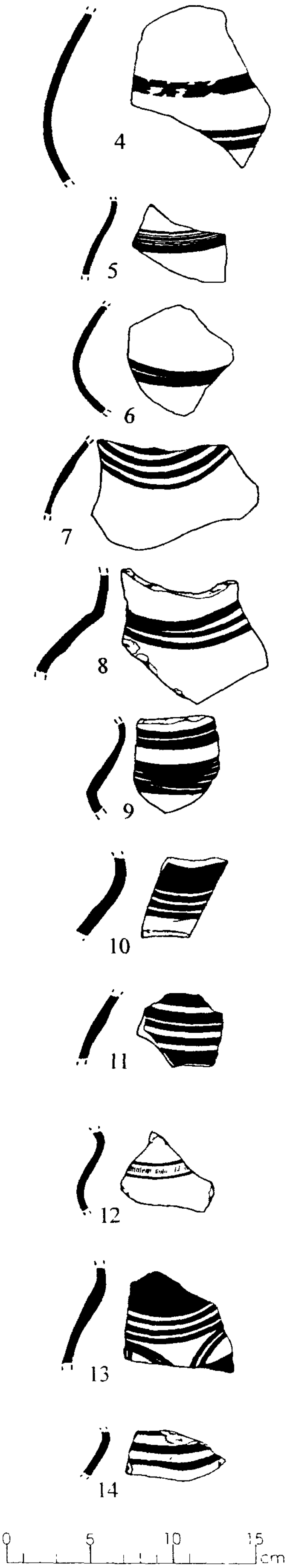


Fig. 32

4. Fragment of a jar of red ware with a globular body, painted with black bands and chain-like design, of medium fabric, showing an oxidized core. From a mid-level of Period I.

5. Fragment of a jar of red ware with an oblique body, painted with black bands of a fine slip, of fine fabric, showing an oxidized core. From an early level of Period I.

6. Fragment of a jar of red ware with a fine slip with globular body, painted with two black bands, of fine fabric, showing an oxidized core. From an early level of Period I.

7. Fragment of a jar of red ware with a globular body, painted with black bands, of medium fabric, showing an oxidized core. From a late level of Period I.

8. Fragment of a jar of red ware with an oblique body, painted with black bands, of medium fabric, showing an oxidized core. From an early level of Period I.

9. Fragment of a vase of red ware with a spherical body and carinated sides, painted with brown band, of fine fabric, showing an oxidized core. From a mid-level of Period I.

10. Fragment of a jar of red ware with oblique sides, painted with black thick and thin bands, of medium fabric, showing an oxidized core. From a late level of Period I.

11. Fragment of a jar of dark red ware with a globular body, painted with black bands, of medium fabric, showing an oxidized core. From an early level of Period I.

12. Fragment of a jar of red ware with a globular body, painted with black and white bands, of fine fabric, showing an oxidized core. From an early level of Period I.

13. Fragment of a jar of red ware with an oblique body, painted with black thick and thin bands with groups of semi-circles under the bands, of medium fabric, showing an oxidized core. From a late level of Period I.

14. Fragment of a red ware with an oblique body, painted with black and white thin bands, of medium fabric, showing an oxidized core. From a late level of Period I.

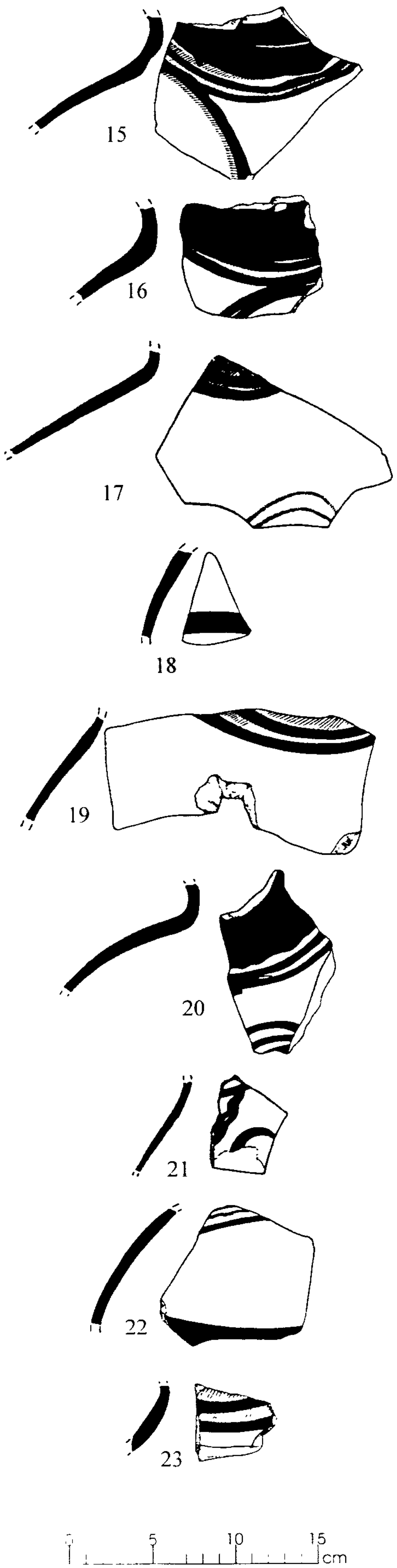


Fig. 32

15. Fragment of a dark red ware with a globular body, painted with black and white bands and semi-circles below the bands, of coarse fabric, showing an oxidized core. From a late level of Period I.

16. Fragment of a jar of red ware with an oblique body, painted with thick band and white thin band with a semi-circles below the band, of coarse fabric, showing an oxidized core. From a late level of Period I.

17. Fragment of a jar of red ware with an oblique body, painted with black and white bands on the neck and white double semi-circles on the shoulder, of medium fabric, showing an oxidized core. From a late level of Period I.

18. Fragment of red ware with an oblique body, painted with black horizontal band, of medium fabric, showing an oxidized core. From an early level of Period I.

19. Fragment of a jar of red ware with an oblique shoulder, painted with black and white horizontal bands, of coarse fabric, showing an oxidized core. From a late level of Period I.

20. Fragment of a jar of red ware with a concave neck and globular body, painted with thick and thin black bands and semi-circles, of coarse fabric, showing an oxidized core. From a mid-level of Period I.

21. Fragment of a jar of red ware with an oblique body, painted with black horizontal band, oblique wavy line and semi-circle, of coarse fabric, showing an oxidized core. From a mid-level of Period I.

22. Fragment of a jar of red ware with a globular body, painted with black and white bands, of medium fabric, showing an oxidized core. From an early level of Period I.

23. Fragment of a jar of red ware with oblique body, painted with black and white bands, of coarse fabric, showing an oxidized core. From a late level of Period I.

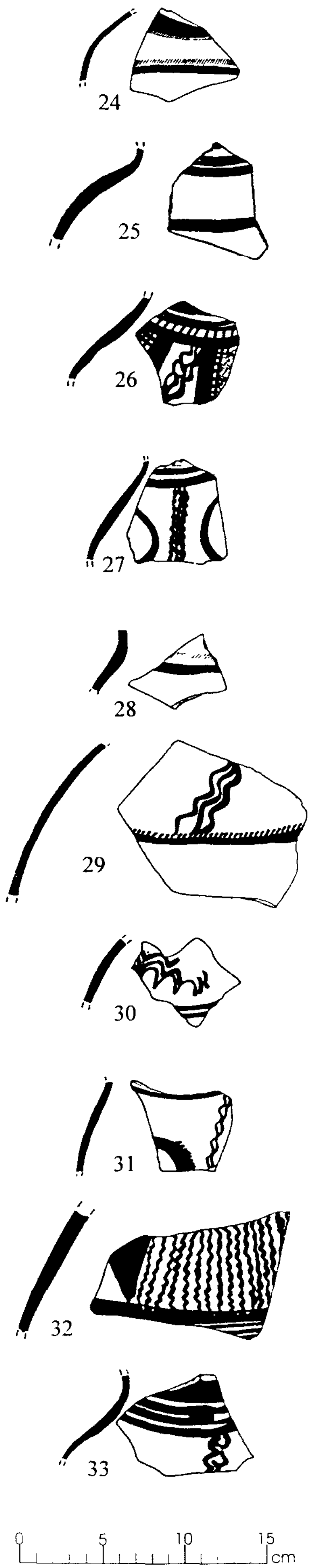


Fig. 32

24. Fragment of jar of red ware with a globular body, painted with black and white bands, of fine fabric, showing an oxidized core. From an early level of Period I.

25. Fragment of jar of red ware with a globular body, painted with black bands, of coarse fabric, showing an oxidized core. From an early level of Period I.

26. Fragment of a jar of red ware with globular body, painted with black horizontal and vertical lines with chequer design and vertical rope-like design, of medium fabric, showing an oxidized core. From a mid-level of Period I.

27. Fragment of a jar of red ware with an oblique body, painted with black horizontal bands, vertical wavy lines having loops on both the sides, of medium fabric, showing an oxidized core. From an early level of Period I.

28. Fragment of a jar of dark red ware with oblique sides, painted with black and white horizontal bands, of coarse fabric, showing an oxidized core. From a late level of Period I.

29. Fragment of a jar of red ware with a globular body, painted with black and white bands on the body and above wavy vertical lines, of medium fabric, showing an oxidized core. From a late level of Period I.

30. Fragment of a jar of red ware with a globular body, painted with black having groups of wavy line, of medium fabric, showing an oxidized core. From a late level of Period I.

31. Fragment of a jar of dark red ware with oblique sides, painted with black and white having loop and a chain-like pattern, of coarse fabric, showing an oxidized core. From a late level of Period I.

32. Fragment of a jar of red ware with oblique sides, painted with black horizontal wavy lines and triangle, of medium fabric, showing an oxidized core. From an early level of Period I.

33. Fragment of a jar of red ware with a globular body, painted with black horizontal bands and double wavy lines, of medium fabric, showing an oxidized core. From a late level of Period I.

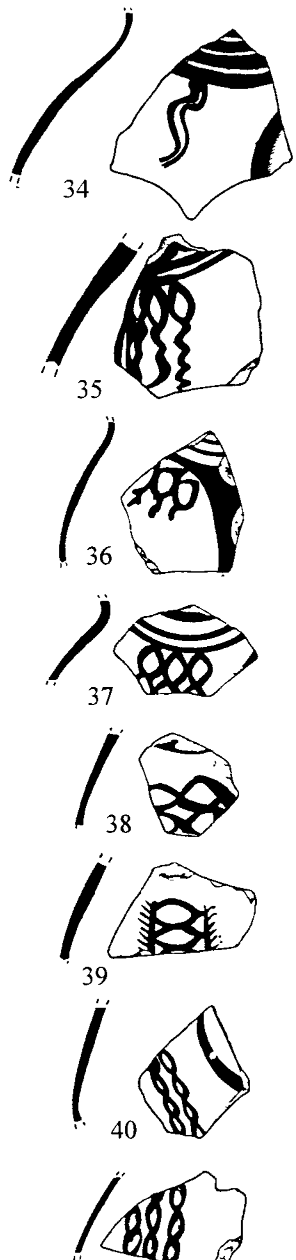


Fig. 32

34. Fragment of a jar of red ware with oblique sides, painted with black and white horizontal bands and double vertical loops and semi-circles, of coarse fabric, showing an oxidized core. From an early level of Period I.

35. Fragment of a jar of red ware with oblique sides, painted with black horizontal wavy lines with loop at the end and vertical lines, of medium fabric, showing an oxidized core. From a mid-level of Period I.

36. Fragment of a jar of red ware with oblique sides, painted with black arches with loops below horizontal bands, of medium fabric, showing an oxidized core. From an early level of Period I.

37. Fragment of a jar of red ware with oblique sides, painted with horizontal black bands and continuous chain pattern, of medium fabric, showing an oxidized core. From an early level of Period I.

38. Fragment of a jar of red ware with oblique sides, painted with black chains design, of medium fabric, showing an oxidized core. From a late level of Period I.

39. Fragment of a jar of red ware with two vertical lines eye like design, of medium fabric, showing an oxidized core. From a late level of Period I.

40. Fragment of a jar of red ware with an oblique body, painted with black double chain design and semi-circle, of medium fabric, showing an oxidized core. From an early level of Period I.

41. Fragment of a jar of red ware with oblique sides painted with three, vertical chains, of medium fabric, showing an oxidized core. From an early level of Period I.

FIG. 33

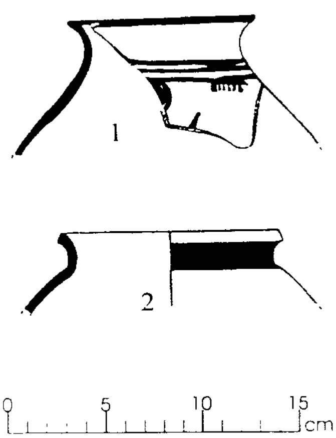


Fig. 33

1. Fragment of a vase of red ware with an out-turned featureless rim and concave neck, painted with black horizontal bands, vertical strokes and double circles, of fine fabric, showing an oxidized core. From a late level of Period I.

2. Fragment of a vase of red ware with slightly out-turned featureless rim, concave neck and oblique body, painted with black thick band on the neck, of medium fabric, showing an oxidized core. From an early level of Period I.

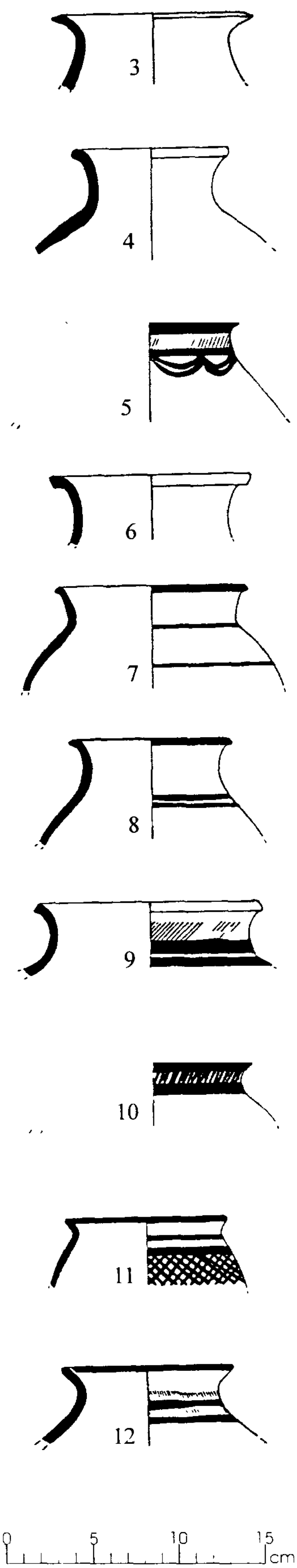


Fig. 33

3. Fragment of a vase of red ware with an out-turned featureless rim and concave neck, of medium fabric, showing an oxidized core. From an early level of Period I.

4. Fragment of a vase of red ware with an externally out-turned featureless rim and concave neck, of medium fabric, showing an oxidized core. From a late level of Period I.

5. Fragment of a vase of red ware with a slightly out-turned featureless rim, painted with black and white bands and double loops below bands, of coarse fabric, showing an incomplete oxidized greyish core. From a mid-level of Period I.

6. Fragment of a vase of red ware with an out-turned undercut featureless rim, of medium fabric, showing an oxidized core. From a mid-level of Period I.

7. Fragment of a vase of red ware with an externally beaked rim, painted with black bands, of medium fabric, showing an oxidized core. From a late level of Period I.

8. Fragment of a vase of red ware with an out-turned featureless rim and oblique body, painted with black bands, of fine fabric, showing an oxidized core. From an early level of Period I.

9. Fragment of a vase of red ware with externally thickened featureless rim, painted with black and white bands, of medium fabric, showing an oxidized core. From an early level of Period I.

10. Fragment of a vase of red ware with slightly out-turned featureless rim and concave neck, painted with black and white bands, of coarse fabric, showing an oxidized core. From a late level of Period I.

11. Fragment of a vase of red ware with an out-turned sharpened featureless rim, painted with black bands and criss-cross design, of medium fabric, showing an oxidized core. From an early level of Period I.

12. Fragment of a vase of red ware with externally thickened featureless rim, painted with black and white bands, of coarse fabric, showing an incomplete oxidized greyish core. From a late level of Period I.

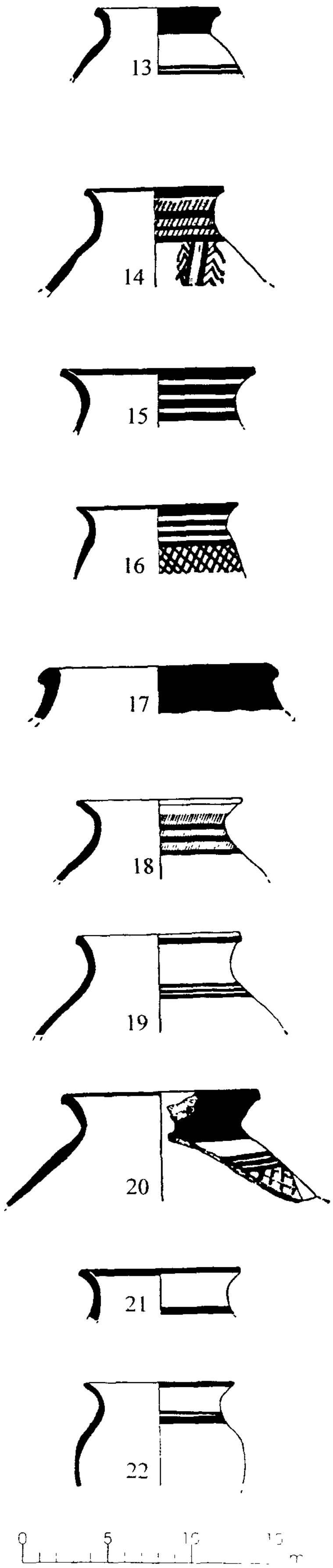


Fig. 33

13. Fragment of a vase of red ware with an externally thickened featureless rim and globular body, painted with thick and thin black and white band, of fine fabric, showing an oxidized core. From an early level of Period I.

14. Fragment of a vase of red ware with a slightly out-turned featureless rim and oblique sides, painted with black and white bands and white vertical line flanked by black strokes, of coarse fabric, showing an oxidized core. From a late level of Period I.

15. Fragment of a vase of red ware with a slightly out-turned featureless rim and concave neck, painted with black and white bands, of fine fabric, showing an oxidized core. From a mid-level of Period I.

16. Fragment of a vase of red ware with slightly out-turned featureless rim, painted with black bands and criss-cross design, of coarse fabric, showing an oxidized core. From a mid-level of Period I.

17. Fragment of a vase of red ware with a beaded rim and short concave neck, painted with black on the rim and neck, of medium fabric, showing an oxidized core. From a late level of Period I.

18. Fragment of a vase of red ware with an out-turned featureless rim and oblique body, painted with black and white bands, of medium fabric, showing an oxidized core. From an early level of Period I.

19. Fragment of a vase of red ware with an externally thickened featureless rim and oblique body, painted with black bands, of fine fabric, showing an oxidized core. From an early level of Period I.

20. Fragment of a vase of red ware with an out-turned thickened rim and oblique body, painted with thick and thin black and white bands and criss-cross design below the bands, of medium fabric, showing an oxidized core. From an early level of Period I.

21. Fragment of a vase of red ware with slightly out-turned featureless rim and concave neck painted with black bands, of medium fabric, showing an oxidized core. From an early level of Period I.

22. Fragment of a vase of red ware with externally out-turned featureless rim and spherical body painted with horizontal bands, of medium fabric, showing an oxidized core. From a late level of Period I.

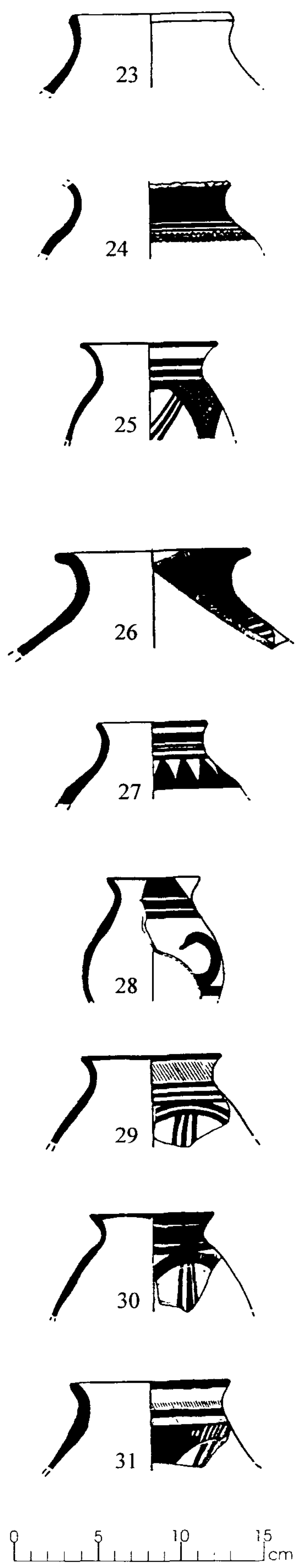


Fig. 33

23. Fragment of a vase of red ware having a brownish slip with slightly out-turned thickened featureless rim, of coarse fabric, showing an oxidized core. From a late level of Period I.

24. Fragment of a vase of red ware with a broken rim and oblique body, painted with black thick and thin bands and close group of wavy lines, of medium fabric, showing an oxidized core. From an early level of Period I.

25. Fragment of a vase of red ware with a slightly out-turned featureless rim and concave neck, painted with black and white bands and arches filled with three oblique lines and in-between triangle filled criss-cross design, of medium fabric, showing an oxidized core. From a mid-level of Period I.

26. Fragment of a vase of red ware with an out-turned featureless rim and concave neck, painted with black in the rim and neck and black bands on the shoulder, of medium fabric, showing an oxidized core. From an early level of Period I.

27. Fragment of a vase of red ware with a slightly out-turned featureless rim and concave neck, painted with black bands and running triangles, of medium fabric, showing an oxidized core. From a late level of Period I.

28. Fragment of a vase of red ware with an out-turned featureless rim and globular body, painted with black and white bands and loop, of fine fabric, showing an oxidized core. From a mid-level of Period I.

29. Fragment of a vase of red ware with an externally thickened featureless rim and oblique sides, painted with black and white bands and vertical lines within arch, of medium fabric, showing an oxidized core. From an early level of Period I.

30. Fragment of a vase of red ware with an out-turned featureless rim and oblique body, painted with black and white bands and vertical lines within arch, of medium fabric, showing an oxidized core. From a late level of Period I.

31. Fragment of a vase of red ware with slightly out-turned featureless rim and concave neck, painted with black and white horizontal bands, and vertical black and white lines above and inside the arch, of coarse fabric, showing an oxidized core. From a late level of Period I.

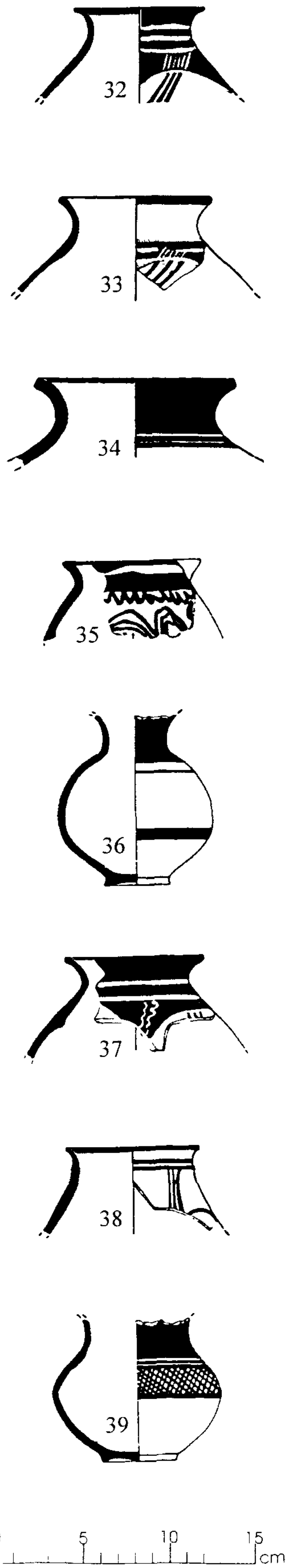


Fig. 33

32. Fragment of a vase of red ware with an out-turned featureless rim, concave sides and oblique body, painted with black and white horizontal and oblique lines within an arch, of medium fabric, showing an oxidized core. From a late level of Period I.

33. Fragment of a vase of red ware with an out-turned featureless rim and oblique body, painted with black and white horizontal and oblique lines, of medium fabric, showing an oxidized core. From a late level of Period I.

34. Fragment of a vase of red ware with an out-turned thickened featureless rim, painted with black on the rim and thin black bands below, of medium fabric, showing an oxidized core. From a late level of Period I.

35. Fragment of a vase of red ware with slightly out-turned featureless rim and oblique band, wavy lines and semi-circles in groups of three each, of coarse fabric, showing an oxidized core. From an early level of Period I.

36. Small complete vase of red ware with broken rim, concave neck and globular body with ring base, painted with black, thick and thin bands, of fine fabric, showing an oxidized core. From a late level of Period I.

37. Fragment of a vase of red ware with an out-turned featureless rim and oblique body, painted with black and white horizontal bands and white vertical wavy lines, of medium fabric showing an oxidized core. From an early level of Period I.

38. Fragment of a vase of red ware with an externally thin featureless rim, painted with black and white bands and black vertical lines, of medium fabric, showing an oxidized core. From a late level of Period I.

39. Vase of red ware with a broken rim and spherical body and ring base painted with black thick and thin bands and within two horizontal lines criss-cross design, of medium fabric, showing an oxidized core. From an early level of Period I.

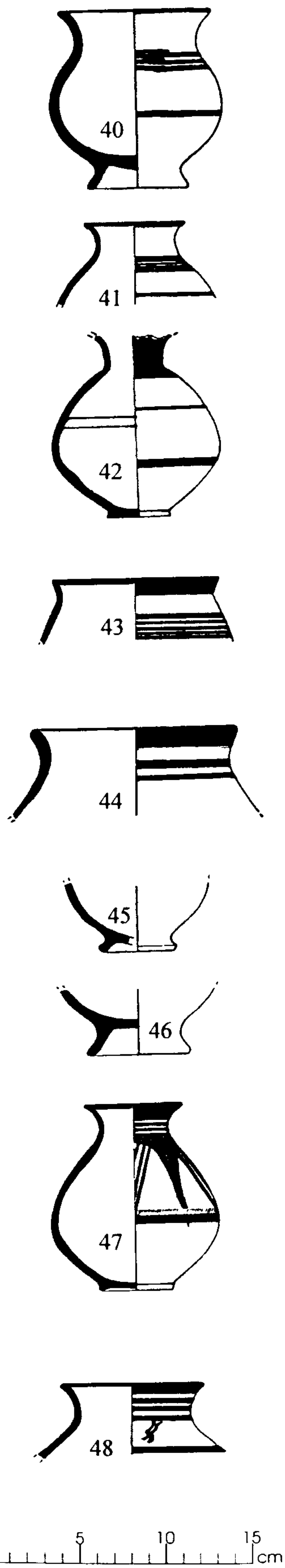


Fig. 33

40. Vase of red ware with an out-turned featureless rim, concave neck and globular body with a ring base, painted with black bands, of medium fabric, showing an oxidized core. From a late level of Period I.

41. Fragment of a small vase of red ware with externally thin featureless rim and globular body, painted with black bands, of fine fabric, showing an oxidized core. From a late level of Period I.

42. Vase of red ware with a broken rim, small neck and globular body with ring base, painted with black thick and thin bands, of medium fabric, showing an oxidized core. From a mid-level of Period I.

43. Fragment of a vase of red ware with a slightly out-turned featureless rim and oblique body painted with thick and thin bands, of medium fabric, showing an oxidized core. From a late level of Period I.

44. Fragment of a vase of red ware with externally thickened featureless rim, painted with black bands, of medium fabric, showing an oxidized core. From a late level of Period I.

45. Base of a vase with a globular body and ring base, of medium fabric, showing an oxidized core. From an early level of Period I.

46. Base of a cup of red ware, internally deep with a ring base, of medium fabric, showing an oxidized core. From a mid-level of Period I.

47. Complete vase of red ware with an out-turned featureless rim and concave neck and globular body with ring base, painted with black and white horizontal lines with arches in black and white enclosing three vertical lines, of fine fabric, showing an oxidized core. From a late level of Period I.

48. Fragment of a vase of red ware with an out-turned featureless rim and concave neck, painted with black and white bands, and with a group of two wavy lines, of fine fabric, showing an oxidized core. From an early level of Period I.

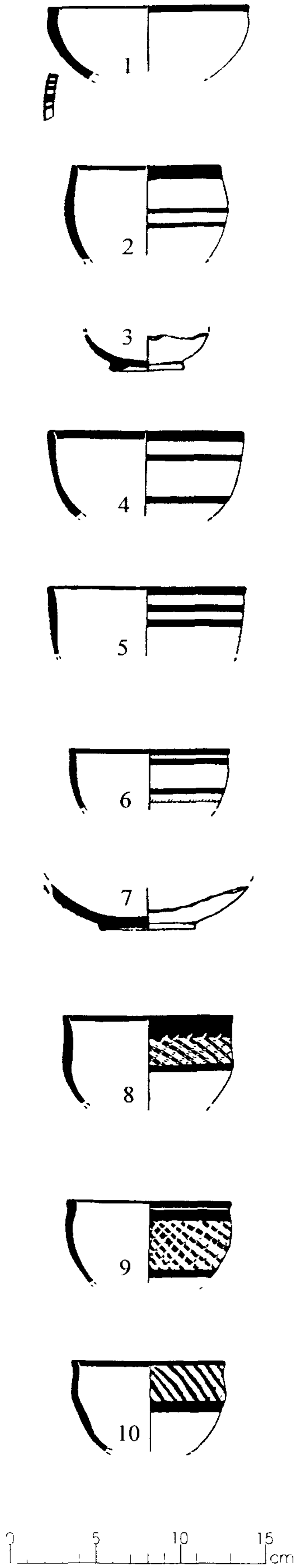


Fig. 34

FIG. 34

1. Fragment of a bowl of red ware with thickened featureless rim, shallow sides painted with black strokes, of coarse fabric, showing an oxidized core. From a late level of Period I.
2. Fragment of a bowl of red ware with featureless rim and deep straight sides, painted with black bands, of medium fabric, showing an oxidized core. From a mid-level of Period I.
3. Fragment of a bowl of red ware with a ring base, of medium fabric, showing an oxidized core. From a late level of Period I.
4. Fragment of a bowl of red ware with a thickened featureless rim and shallow sides, painted with black bands, of coarse fabric, showing an oxidized core. From an early level of Period I.
5. Fragment of a deep bowl of red ware with featureless rim and straight sides, painted with black bands, of coarse fabric, showing an oxidized core. From a mid-level of Period I.
6. Fragment of a bowl of red ware, featureless rim and shallow sides, painted with black and white bands, of coarse fabric, showing an oxidized core. From a late level of Period I.
7. Fragment of a bowl of red ware with a ring base, of medium fabric, showing an oxidized core. From a mid-level of Period I.
8. Fragment of a deep bowl of red ware with a featureless rim, painted with black and white criss-cross design within black bands, of medium fabric, showing an oxidized core. From an early level of Period I.
9. Fragment of a deep bowl of red ware with externally thickened featureless rim, painted with black bands and black and white criss-cross design, of medium fabric, showing an oxidized core. From a late level of Period I.
10. Fragment of a deep bowl of red ware with a slightly out-turned featureless rim, painted with black and white criss-cross design within black bands, of medium fabric, showing an oxidized core. From an early level of Period I.

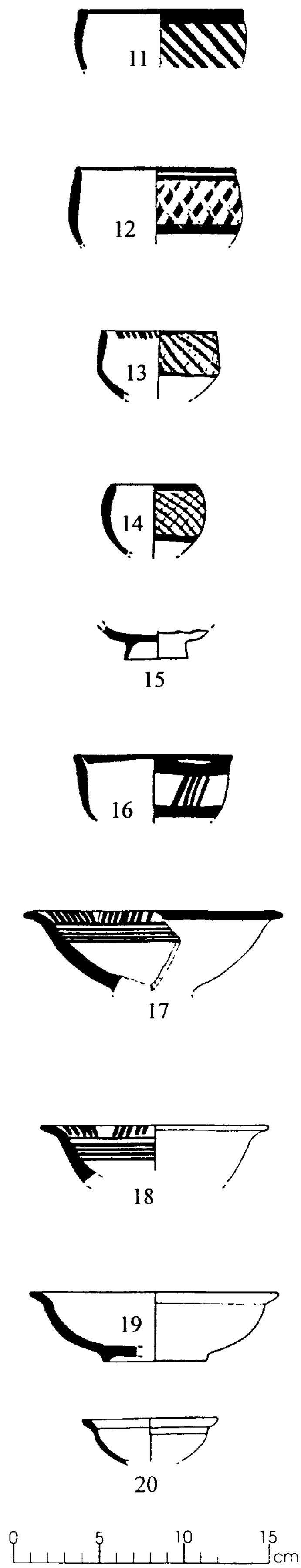


Fig. 34

11. Fragment of a deep bowl of red ware with a thickened featureless rim and convex sides, painted with black and white criss-cross design, of medium fabric, showing an oxidized core. From a late level of Period I.

12. Fragment of a bowl of red ware with featureless rim and straight sides, painted with black and white criss-cross design, of medium fabric, showing an oxidized core. From a mid-level of Period I.

13. Fragment of a bowl of red ware with thickened featureless rim and concave sides, painted on the rim with black strokes and with black and white criss-cross design on the exterior, of medium fabric, showing an oxidized core. From a mid-level of Period I.

14. Fragment of a small bowl of red ware with featureless rim and convex sides, painted with black and white criss-cross design, of medium fabric, showing an oxidized core. From a late level of Period I.

15. Base fragment of a bowl with ring stand, of coarse fabric, showing an incomplete oxidized core. From a mid-level of Period I.

16. Fragment of a bowl of red ware with featureless rim and straight sides, painted with black horizontal bands enclosing oblique lines, of medium fabric, showing an oxidized core. From a mid-level of Period I.

17. Fragment of a bowl-cum-dish of red ware with an out-turned rim, tapering sides and almost sagger base, painted internally with black bands and strokes on the rim externally with black band on the rim, of coarse fabric, showing an oxidized core. From an early level of Period I.

18. Fragment of a bowl-cum-dish of red ware with an out-turned rim and tapering sides, painted internally with black bands and strokes on the top of the rim, of medium fabric, showing an oxidized core. From an early level of Period I.

19. Fragment of a buffish red ware with an out-turned rim, tapering sides and ring base, of fine fabric, showing an oxidized core. From a late level of Period I.

20. Fragment of small bowl of red ware with slightly out-turned rim, of medium fabric, showing an oxidized core. From a mid-level of Period I.

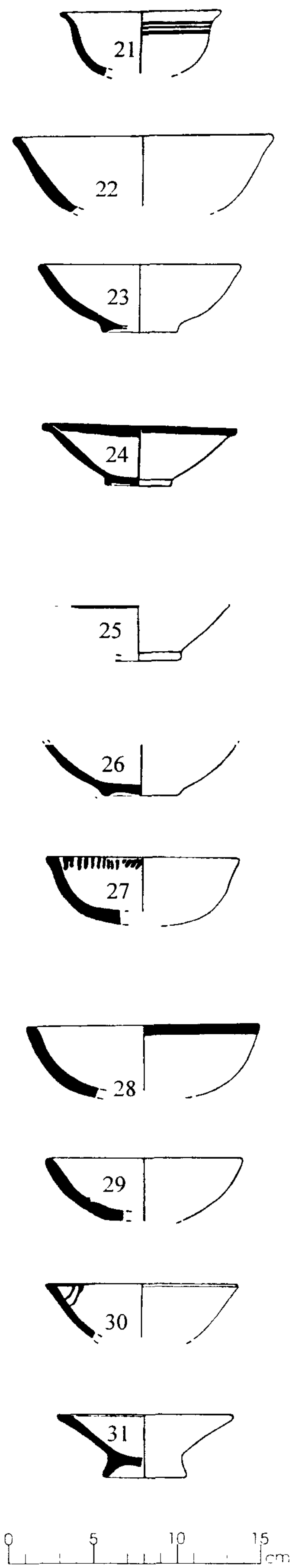


Fig. 34

21. Fragment of a bowl of red ware with an out-turned rim and slightly carinated sides, having black bands, of medium fabric, showing an oxidized core. From a mid-level of Period I.

22. Fragment of a bowl of red ware with featureless rim and tapering sides of coarse fabric, showing an oxidized core. From a late level of Period I.

23. Fragment of a bowl of red ware with featureless rim and tapering sides with ring base, of medium fabric, showing an oxidized core. From an early level of Period I.

24. Fragment of a bowl of red ware with featureless rim, tapering sides and ring base, painted internally and externally with black band on the rim, of medium fabric, showing an oxidized core. From an early level of Period I.

25. Fragment of a bowl of red ware with featureless rim, tapering sides painted internally and externally on the rim, of medium fabric, showing an oxidized core. From a late level of Period I.

26. Base fragment of a bowl with tapering sides and ring base, of coarse fabric, showing an oxidized core. From a late level of Period I.

27. Fragment of a bowl of red ware with a thickened featureless rim slightly convex sides with flat base, painted internally with black strokes, of medium fabric, showing an oxidized core. From a late level of Period I.

28. Fragment of a bowl of red ware with a thickened featureless rim and flat base, painted externally with black band on the rim, of coarse fabric, showing an oxidized core. From a late level of Period I.

29. Fragment of a bowl of red ware with a thickened featureless rim and flat base, of medium fabric, showing an oxidized core. From a late level of Period I.

30. Fragment of a bowl of red ware with featureless rim and tapering sides, painted internally with two black strokes, of coarse fabric, showing an oxidized core. From a mid-level of Period I.

31. Fragment of a bowl of red ware with a thickened featureless rim and footed base, of coarse fabric, showing an oxidized core. From a mid-level of Period I.

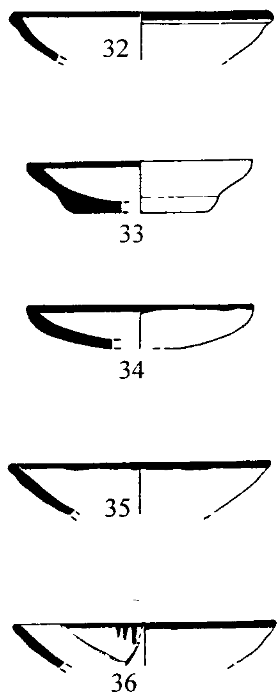


Fig. 34

32. Fragment of a bowl of red ware with a thickened featureless rim and flat base, the rim painted externally and internally, of coarse fabric, showing an oxidized core. From a late level of Period I.

33. Fragment of a bowl of red ware with featureless rim and sagger base, of coarse fabric, showing an oxidized core. From a late level of Period I.

34. Fragment of a small dish of red ware with featureless rim and flat base, rim painted internally and externally with black band, of coarse fabric, showing an oxidized core. From a late level of Period I.

35. Fragment of a bowl of red ware with featureless rim, both the sides of rim painted with black band, of medium fabric, showing an oxidized core. From an early level of Period I.

36. Fragment of a bowl of red ware with featureless rim, both sides of the rim painted with black bands, strokes below the band on the interior side. From an early level of Period I.

FIG. 35

1. Fragment of a deep bowl of red ware with a thickened featureless rim and almost straight sides, externally painted rim, of medium fabric, showing an oxidized core. From a late level of Period I.

2. Fragment of a bowl of red ware with featureless rim and straight sides with two bands painted in black, of medium fabric, showing an oxidized core. From an early level of Period I.

3. Fragment of a deep bowl of red ware with featureless rim and oblique sides, externally painted with black bands, of medium fabric, showing an oxidized core. From a late level of Period I.

4. Fragment of a deep bowl of red ware with a slightly out-turned rim, painted externally with thick black bands, of coarse fabric, showing an oxidized core. From a late level of Period I.

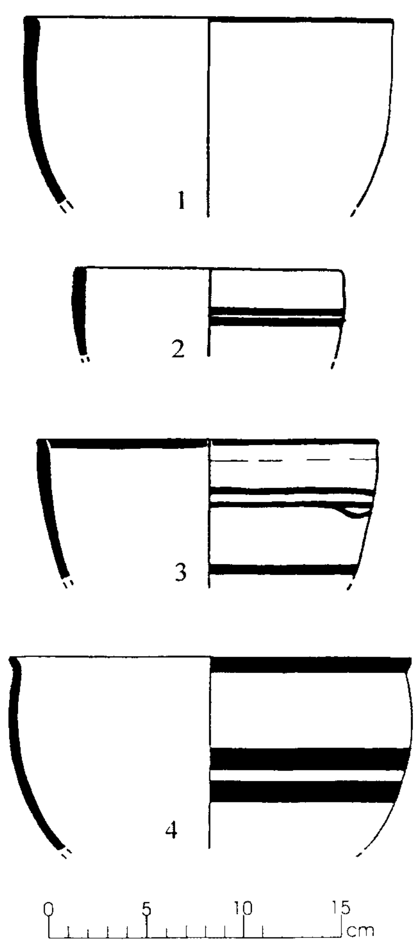


Fig. 35

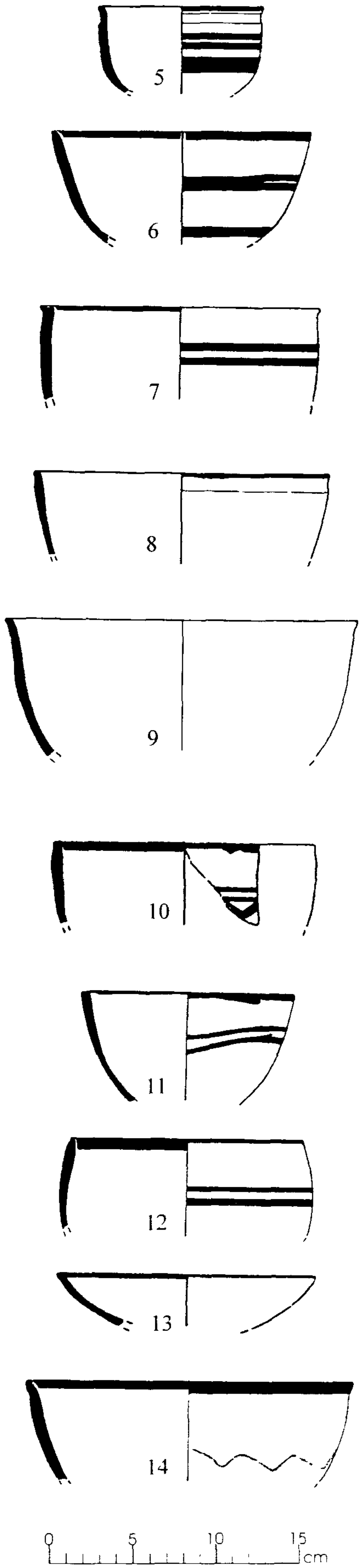


Fig. 35

5. Fragment of a small bowl of red ware with featureless rim and straight sides, painted with black thick and thin bands, of medium fabric, showing an oxidized core. From a late level of Period I.

6. Fragment of a deep bowl of red ware with black bands, of medium fabric, showing an oxidized core. From a late level of Period I.

7. Fragment of a bowl of red ware with a thickened featureless rim and straight sides, painted with black band on the rim (interior side) and body, of coarse fabric, showing an oxidized core. From an early level of Period I.

8. Fragment of a bowl of red ware with featureless rim and straight sides, painted externally and internally with black band on the rim, of medium fabric, showing an oxidized core. From a late level of Period I.

9. Fragment of a deep bowl of red ware with featureless rim and slightly tapering sides, of medium fabric, showing an oxidized core. From an early level of Period I.

10. Fragment of a bowl of red ware with featureless rim and straight sides, the rim painted with black band both externally and internally, loop on the exterior below two black bands, of coarse fabric, showing an oxidized core. From a late level of Period I.

11. Fragment of a deep bowl of red ware with a thickened featureless rim and tapering sides, painted with black bands, of medium fabric, showing an oxidized core. From a late level of Period I.

12. Fragment of a bowl of red ware with featureless rim and straight sides, painted with black bands, of medium fabric, showing an oxidized core. From a late level of Period I.

13. Fragment of a bowl of red ware with featureless rim, of medium fabric, showing an oxidized core. From an early level of Period I.

14. Fragment of a bowl of red ware with featureless rim and slightly tapering sides, painted on the rim with black band and white wavy lines, of medium fabric, showing an oxidized core. From a late level of Period I.

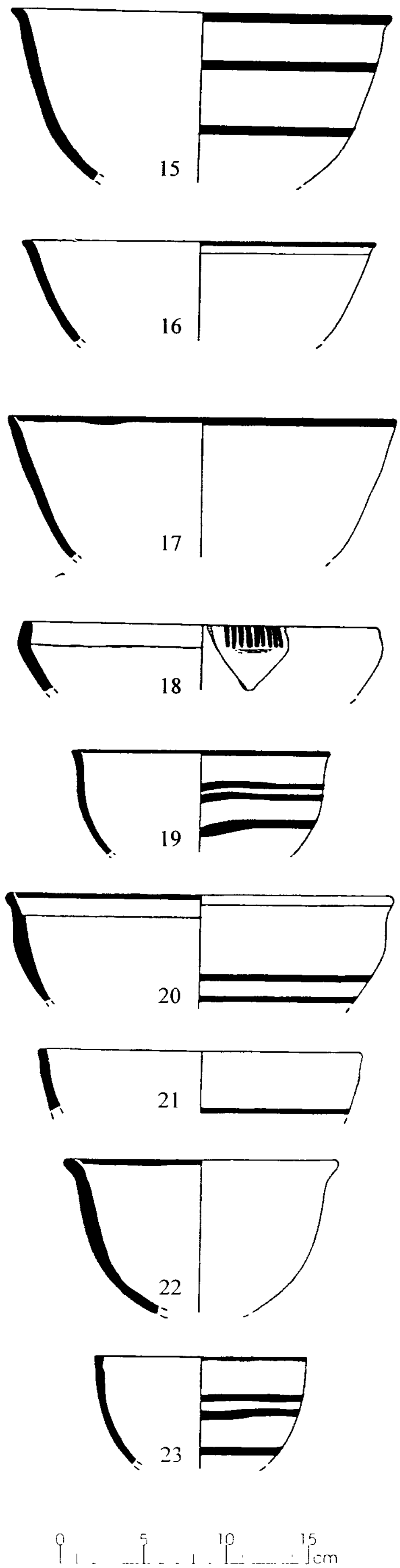


Fig. 35

15. Fragment of a bowl of red ware with a slightly out-turned featureless rim and tapering sides, painted with black wide bands, of coarse fabric, showing an oxidized core. From a late level of Period I.

16. Fragment of a deep bowl of red ware with featureless rim and slightly tapering sides, painted with black band on the rim, of coarse fabric, showing an oxidized core. From a mid-level of Period I.

17. Fragment of a deep bowl of red ware with featureless rim and slightly tapering sides, painted with black band on the rim externally and internally, of coarse fabric, showing an oxidized core. From a late level of Period I.

18. Fragment of a bowl of red ware with an in-turned featureless rim, painted with black strokes on the rim, of coarse fabric, showing an oxidized core. From a late level of Period I.

19. Fragment of a bowl of red ware with a slightly out-turned featureless rim and straight sides, painted with black bands, of medium fabric, showing an oxidized core. From a late level of Period I.

20. Fragment of a bowl of red ware with an out-turned featureless rim and straight sides, painted with black bands, of medium fabric, showing an oxidized core. From a late level of Period I.

21. Fragment of a bowl of red ware with featureless rim and straight sides, painted with a black band, of medium fabric, showing an oxidized core. From a mid-level of Period I.

22. Fragment of a deep bowl of red ware with an out-turned featureless rim and slightly tapering side with a black band internally on the rim, of coarse fabric, showing an oxidized core. From a late level of Period I.

23. Fragment of a deep bowl of red ware with featureless rim and straight sides, painted with black bands, of medium fabric, showing an oxidized core. From a late level of Period I.

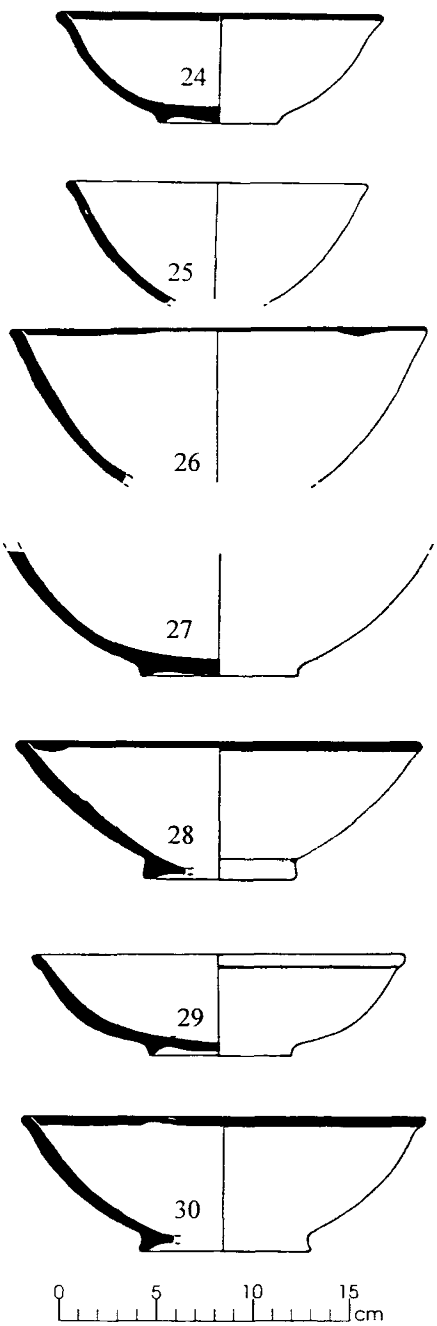


Fig. 35

24. Complete bowl of red ware with featureless rim, tapering sides with ring base, painted on the rim with a black band externally and internally, of medium fabric, showing an oxidized core. From a late level of Period I.

25. Fragment of a bowl of red ware with featureless rim tapering sides, of medium fabric, showing an oxidized core. From a late level of Period I.

26. Fragment of a bowl of red ware with featureless rim and tapering sides, painted on the rim internally and externally with a black band, of coarse fabric, showing an oxidized core. From a mid-level of Period I.

27. Fragment of a base bowl of red ware with a ring base, of coarse fabric, showing an incomplete oxidized core. From a late level of Period I.

28. Fragment of a bowl of red ware with featureless rim, tapering sides with ring base, painted in the rim externally and internally, of medium fabric, showing an oxidized core. From a late level of Period I.

29. Fragment of a bowl of red ware with a thickened featureless rim and ring base, of medium fabric, showing an oxidized core. From a mid-level of Period I.

30. Fragment of a bowl of red ware with featureless rim tapering sides with ring base, painted with black band on the rim, internally and externally, of medium fabric, showing an oxidized core. From an early level of Period I.

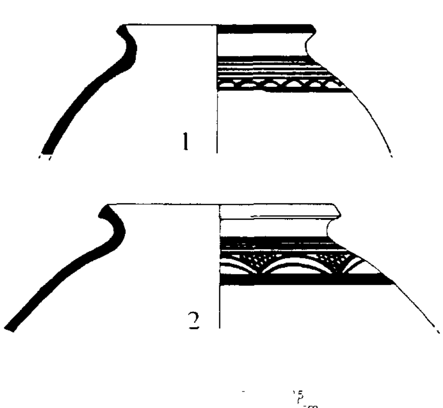


Fig. 36

FIG. 36

1. Fragment of a big jar of red ware with a beaded rim and globular body, painted with black bands and running semi-circle below, of medium fabric. From a late level of Period I.

2. Fragment of a big jar of red ware with externally thickened rim, and oblique body, painted with black horizontal bands and latticed triangles panelled by horizontal band and double semi-circles, of medium fabric, showing an oxidized core. From a late level of Period I.

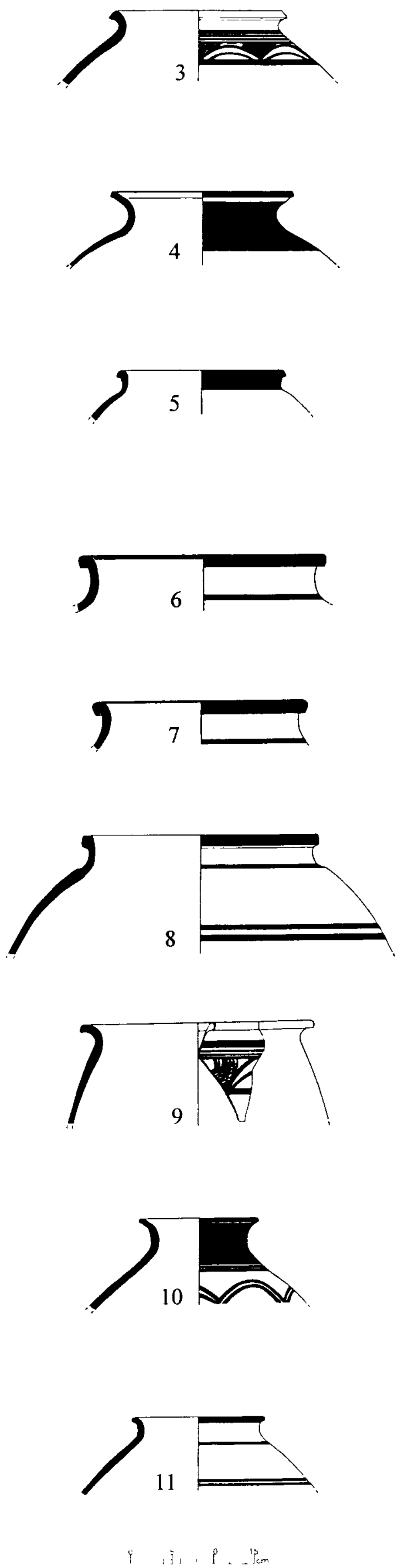


Fig. 36

3. Fragment of a big jar of red ware with an out-turned thickened featureless rim and oblique body, painted with latticed triangles, panelled by horizontal band and semi-circles, of medium fabric, showing an oxidized core. From a late level of Period I.

4. Fragment of a big jar of red ware with an out-turned rim, concave neck and oblique body, painted with a thin band on the rim and black on neck and shoulder, of coarse fabric, showing incomplete oxidized core. From a late level of Period I.

5. Fragment of a jar of red ware with an out-turned beaked rim and oblique body, painted with thick black band on the rim and the neck, of medium fabric, showing an oxidized core. From a late level of Period I.

6. Fragment of a jar of red ware with an out-turned thickened beaked undercut rim and concave neck, painted with black bands of medium fabric, showing an oxidized core. From an early level of Period I.

7. Fragment of a jar of red ware with externally inturned collared undercut rim, painted with black bands, of medium fabric, showing an oxidized core. From an early level of Period I.

8. Fragment of a big jar of red ware with an out-turned thickened vertical rim, concave neck and oblique body, painted with black thick and thin bands, of medium fabric, showing an oxidized core. From a late level of Period I.

9. Fragment of a jar of red ware with an out-turned featureless rim and oblique body, painted with black bands and oblique lines making a plant-like design, of coarse fabric, showing an oxidized core. From a late level of Period I.

10. Fragment of a big jar of red ware with an out-turned featureless rim, concave neck and oblique body, painted with black on the rim and neck, two thin bands below, followed by double semi-circles of coarse fabric, showing an oxidized core. From a mid-level of Period I.

11. Fragment of a big jar of red ware with an out-turned featureless rim and oblique shoulders, painted with black bands, of medium fabric, showing an oxidized core. From a late level of Period I.

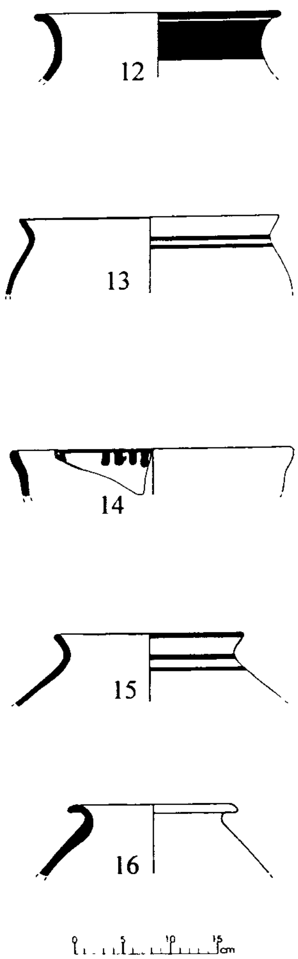


Fig. 36

12. Fragment of a jar of red ware with slightly out-turned featureless rim and concave neck, painted with black on the rim and the neck, of medium fabric, showing an incomplete oxidized greyish core. From a late level of Period I.

13. Fragment of a big jar of red ware with a slightly out-turned featureless rim and globular body, painted with thin black bands, of medium fabric, showing an oxidized core. From an early level of Period I.

14. Fragment of a jar of red ware with a featureless rim and straight sides, painted internally with four vertical black strokes with a band, of medium fabric, above and a band on the rim externally showing an oxidized core. From a late level of Period I.

15. Fragment of a jar of red ware with an out-turned featureless rim and oblique shoulders, painted with black bands, of coarse fabric, showing an incomplete oxidized greyish core. From a late level of Period I.

16. Fragment of a jar of red ware with an out-turned featureless rim, concave neck and oblique body, of coarse fabric, showing an incomplete oxidized greyish core. From a mid-level of Period I.

FIG. 37

1. Fragment of a bowl of red ware with externally thickened featureless rim, painted with black band on the rim, of medium fabric, showing an oxidized core. From a late level of Period I.

2. Fragment of a basin of red ware with a featureless rim, painted externally with a black band on rim and shallow base, of medium fabric, showing an oxidized core. From a late level of Period I.

3. Fragment of a bowl of red ware with a slightly out-turned featureless rim and deep base, of medium fabric showing an oxidized core. From a late level of Period I.

4. Fragment of a basin of red ware with a slightly out-turned rim and convex sides, of coarse fabric, showing an oxidized core. From an early level of Period I.

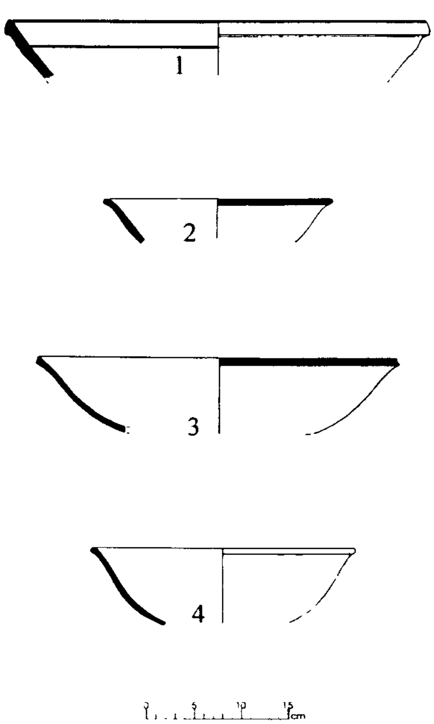


Fig. 37

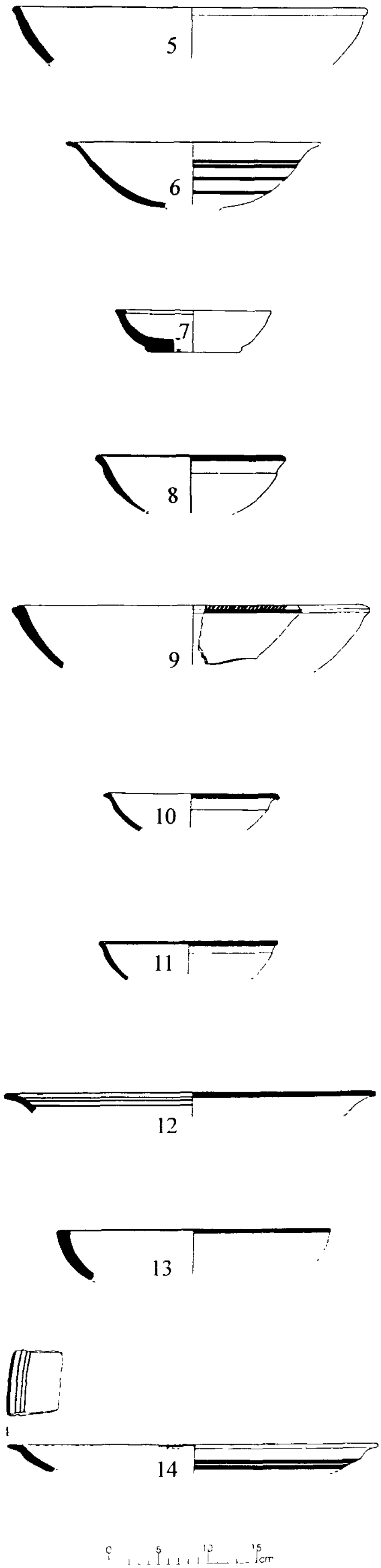


Fig. 37

5. Fragment of a deep bowl of red ware with a slightly out-turned featureless rim, of coarse fabric, showing an oxidized core. From a mid-level of Period I.

6. Fragment of a small dish of red ware with a roughly nail-headed rim, convex sides and discular base, painted externally with black bands, of medium fabric, showing an oxidized core. From a mid-level of Period I.

7. Fragment of a deep bowl of red ware with a featureless rim, painted internally and externally with black bands on the rim, of fine fabric, showing an oxidized core. From a mid-level of Period I.

8. Fragment of a basin of red ware with a thickened rim, painted with black strokes and a band on the rim, of medium fabric, showing an oxidized core. From a late level of Period I.

9. Fragment of a small bowl of red ware with slightly out-turned featureless rim and shallow base, painted with black band on the rim, of fine fabric, showing an oxidized core. From a mid-level of Period I.

10. Fragment of a bowl of red ware with a featureless rim and shallow base, painted internally and externally on the rim, of medium fabric, showing an oxidized core. From a late level of Period I.

11. Fragment of a basin of red ware with a slightly out-turned featureless rim, painted internally and externally with black bands, of fine fabric, showing an oxidized core. From a late level of Period I.

12. Fragment of a bowl of red ware with an internally thickened rim and concave sides, painted externally with black bands, of medium fabric, showing an oxidized core. From an early level of Period I.

13. Fragment of a dish of red ware with a splayed-out rim, painted externally and internally with black thin and thick bands, of fine fabric, showing an oxidized core. From a late level of Period I.

14. Fragment of a dish of red ware with a splayed-out rim, painted externally with black bands, of fine fabric, showing an oxidized core. From an early level of Period I.

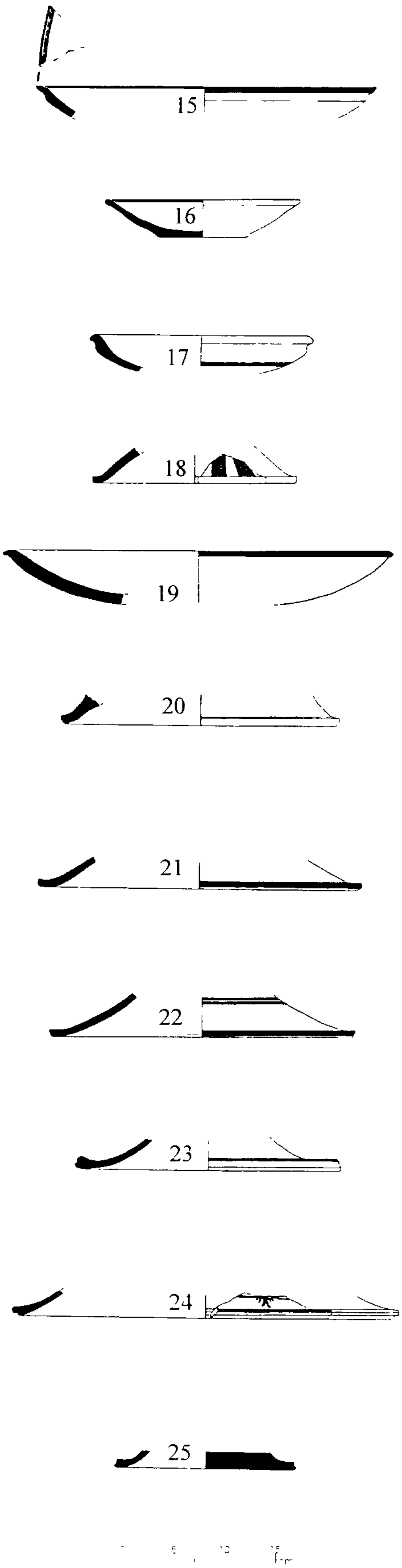


Fig. 37

15. Fragment of a bowl of red ware with featureless rim and flat base, painted internally with a black band, over the rim, of coarse fabric, showing an oxidized core. From a mid-level of Period I.

16. Fragment of a dish of red ware with an elliptical rim, concave neck and shallow base having a black horizontal band, of medium fabric, showing an oxidized core. From an early level of Period I.

17. Fragment of a dish of dish-on-stand with a slightly raised edge of medium fabric, showing an oxidized core. From an early level of Period I.

18. Fragment of a stand of red ware with a slightly raised edge, of coarse fabric, showing an incomplete oxidized core. From an early level of Period I.

19. Fragment of a dish of a dish-on-stand, red ware with an out-turned base, of medium fabric, showing an oxidized core. From a mid-level of Period I.

20. Fragment of a stand of a dish-on-stand with an out-turned base, painted with black bands, of medium fabric, showing an oxidized core. From a mid-level of Period I.

21. Fragment of a stand of a dish-on-stand with an out-turned thickened base, painted with a black band, of medium fabric, showing an oxidized core. From a mid-level of Period I.

22. Fragment of a stand of a dish-on-stand with slightly out-turned thickened base, painted with black band and sun-like design, of medium fabric, showing an oxidized core. From an early level of Period I.

23. Fragment of a stand of a dish-on-stand with a thickened base, painted with thick black band, of medium fabric, showing an oxidized core. From a mid-level of Period I.

24. Fragment of a stand of a dish-on-stand with slightly out-turned thickened base, painted with black floral design, of fine fabric, showing oxidized core. From an early level of Period I.

25. Fragment of a small stand of dish-on-stand, painted with thick black band on the lower base, of medium fabric, showing oxidized core. From a mid-level of Period I.

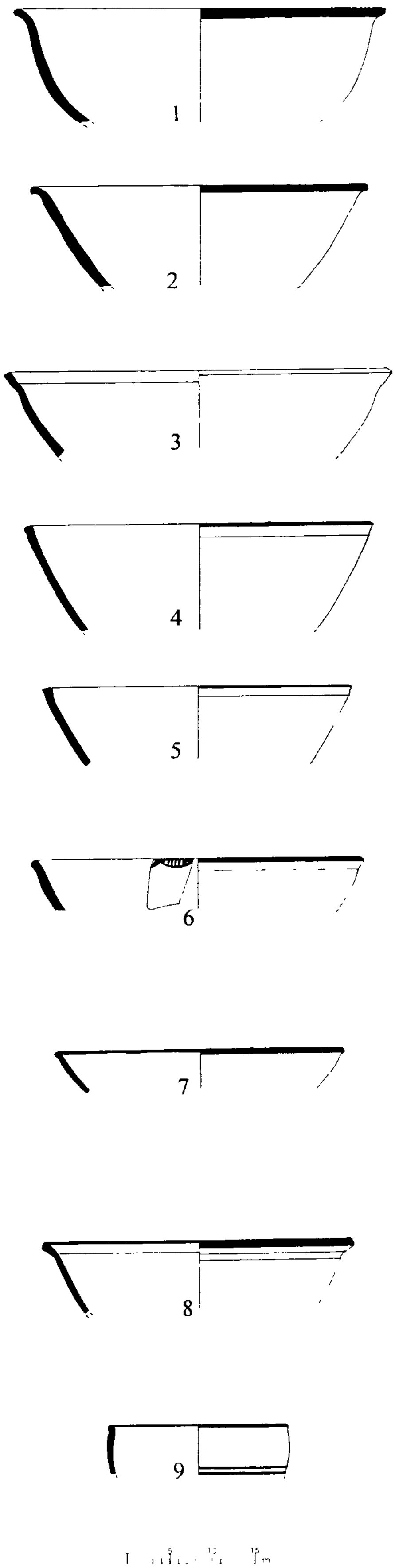


Fig. 38

FIG. 38

1. Fragment of a big basin of red ware with a splayed-out rim, bulbous body and deep base, painted with black band on the rim, of coarse fabric, showing an oxidized core. From a late level of Period I.

2. Fragment of a basin of red ware with an out-turned featureless rim and oblique sides, painted with black band on the rim, deep base, of coarse fabric, showing an oxidized core. From a late level of Period I.

3. Fragment of a basin of red ware with a featureless rim, tapering sides having deep base, of medium fabric, showing an oxidized core. From a late level of Period I.

4. Fragment of a basin of red ware with a featureless rim, tapering sides, deep base, painted with black band on the rim, of medium fabric, showing an oxidized core. From a mid-level of Period I.

5. Fragment of a basin of red ware with a featureless rim, tapering sides, deep base, painted with black band on the rim, of medium fabric, showing an oxidized core. From a mid-level of Period I.

6. Fragment of a basin of red ware with a featureless rim, tapering sides, deep base, painted with black band externally and a panel of strokes internally, of medium fabric, showing an oxidized core. From a mid-level of Period I.

7. Fragment of a basin of red ware with a featureless rim, tapering sides and deep base, painted with black band externally and internally on the rim, of medium fabric, showing an oxidized core. From a late level of Period I.

8. Fragment of a basin of red ware with an out-turned thickened featureless rim, painted with black band internally and externally, deep base, of medium fabric, showing an oxidized core. From a mid-level of Period I.

9. Fragment of a bowl of red ware with a slightly splayed-out and almost straight sides, painted with black bands, of coarse fabric, showing an oxidized core. From a late level of Period I.

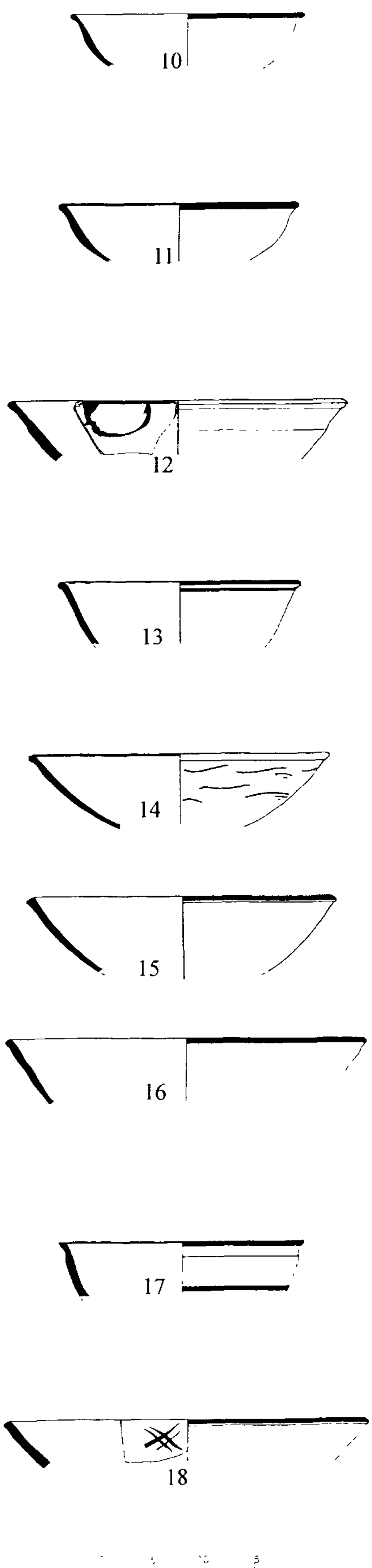


Fig. 38

10. Fragment of a bowl of red ware with a slightly splayed-out featureless rim and shallow base, painted with black band on the rim, of medium fabric, showing an oxidized core. From a mid-level of Period I.

11. Fragment of a bowl of red ware with an out-turned featureless rim, tapering sides, shallow base, painted with black band on the rim externally and internally, of medium fabric, showing an oxidized core. From a late level of Period I.

12. Fragment of a bowl of red ware with a featureless rim, tapering sides, painted with black band and a loop externally on the rim and rough semi-circle internally, of medium fabric, showing an oxidized core. From a mid-level of Period I.

13. Fragment of a bowl of red ware with a slightly out-turned featureless rim, tapering sides, deep base, painted with black band on the rim internally and externally, of medium fabric, showing an oxidized core. From a mid-level of Period I.

14. Fragment of a bowl of red ware with a thickened featureless rim, tapering sides and shallow base, black band on the rim internally, of coarse fabric, showing an oxidized core. From a mid-level of Period I.

15. Fragment of a bowl of red ware with a thickened featureless rim and shallow body, of medium fabric, showing oxidized core. From a late level of Period I.

16. Fragment of a basin of red ware with a featureless rim, tapering sides, painted with black band in the rim externally, of coarse fabric, showing an incomplete oxidized greyish core. From a late level of Period I.

17. Fragment of a bowl of red ware with a slightly out-turned featureless incurved rim, tapering sides, painted with black bands, of medium fabric, showing an oxidized core. From an early level of Period I.

18. Fragment of a basin of red ware with a thickened featureless rim, tapering sides, painted with black band externally and criss-cross internally, of medium fabric, showing an oxidized core. From a mid-level of Period I.

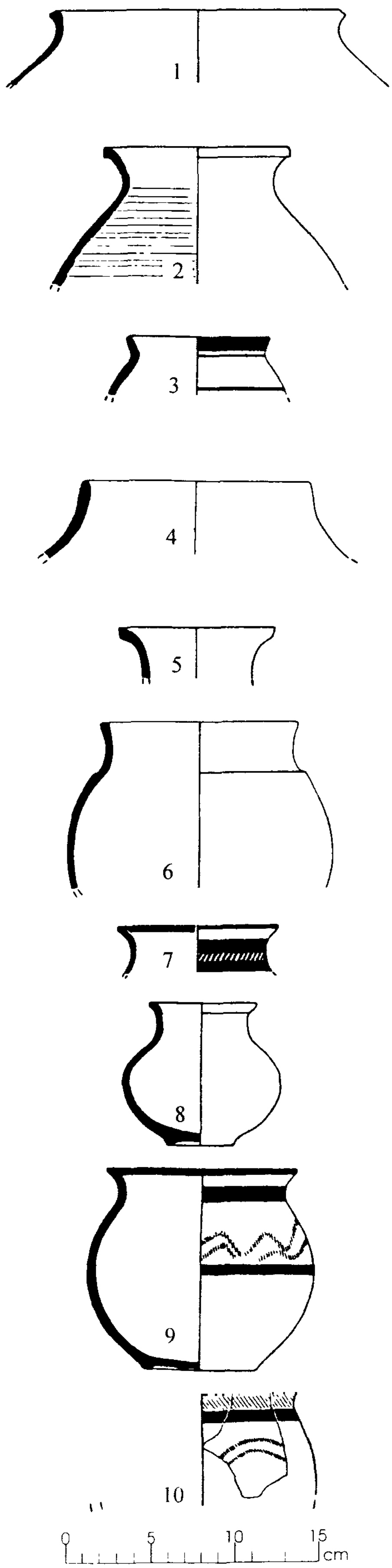


Fig. 39

FIG. 39

1. Fragment of a vase of red ware with slightly out-turned thickened featureless rim and concave neck, of fine fabric, showing an oxidized thin core. From a late level of Period I.

2. Fragment of a vase of red ware with out-turned thickened rim, concave neck and oblique body, having many grooves inside, of coarse fabric, showing an oxidized core. From a mid-level of Period I.

3. Fragment of a vase of red ware with a splayed-out rim and oblique body, painted with black bands, of fine fabric, showing an oxidized core. From a mid-level of Period I.

4. Fragment of a vase of red ware with a thickened featureless rim having a brownish slip, of coarse fabric, showing an oxidized core. From a late level of Period I.

5. Fragment of a vase of red ware with an out-turned featureless rim, of coarse fabric, showing an oxidized core. From a late level of Period I.

6. Fragment of a vase of red ware with slightly out-turned thickened featureless rim and globular body having a brownish slip, of coarse fabric, showing an oxidized core. From an early level of Period I.

7. Fragment of a vase of red ware with slightly out-turned featureless rim and concave neck, painted with black and white bands, of fine fabric, showing an oxidized core. From an early level of Period I.

8. Complete pot of red ware with externally out-turned featureless rim concave neck, globular body with ring base, of coarse fabric, showing an incomplete oxidized core. From a late level of Period I.

9. Complete pot of red ware with a slightly out-turned featureless rim and globular body with a ring base, painted with black bands and white wavy lines, of coarse fabric, showing an incomplete oxidized core. From an early level of Period I.

10. Fragment of a vase of red ware with a slightly out-turned featureless rim and globular body painted with black and white bands and white semi-circle, of medium fabric, showing an oxidized core. From a late level of Period I.

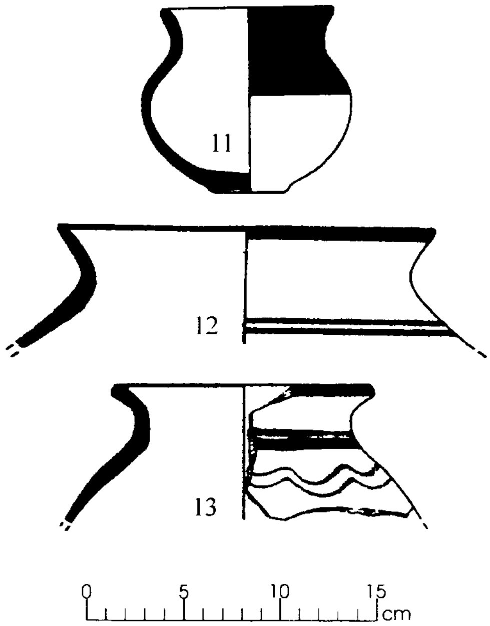


Fig. 39

11. Vase of red ware with an out-turned featureless rim, concave neck, globular body with ring base, painted with black on rim, neck and shoulder, of coarse fabric, showing an incomplete oxidized core. From a mid-level of Period I.

12. Fragment of a vase of red ware with an out-turned featureless rim, painted with black bands, of medium fabric, showing an oxidized core. From an early level of Period I.

13. Fragment of a vase of red ware with a flaring rim, painted with black and white bands and white wavy lines, of medium fabric, showing an oxidized core. From a late level of Period I.

FIG. 40
Fabric "A"

1. Fragment of a shoulder portion of a vase of red ware, painted with black comb-like pattern within double semi-circles, of medium fabric, showing an oxidized core. From an early level of Period I.
2. Fragment of a shoulder portion of a vase, painted with black horizontal bands, wavy lines, semi-circle and comb-like design in a semi-circle, of medium fabric, showing an oxidized core. From a late level of Period I.
3. Fragment of a shoulder portion of a vase, painted with black band and ray-like design of medium fabric, showing an oxidized core. From a late level of Period I.
4. Fragment of a shoulder portion of a vase, buffish red ware, painted with black sigmas, bands and ray-like design, of fine fabric, showing an oxidized core. From an early level of Period I.
5. Fragment of a shoulder portion of a vase of red ware, painted with black having a band and comb-like design in a semicircle, of fine fabric, showing an oxidized core. From a late level of Period I.
6. Fragment of a shoulder portion of a vase of red ware, painted with black band and comb-like design in a semi-circle, of fine fabric, showing an oxidized core. From an early level of Period I.

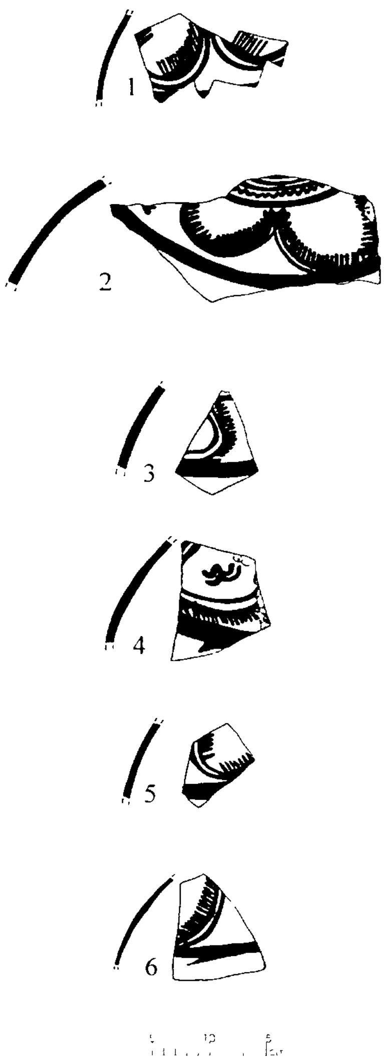


Fig. 40

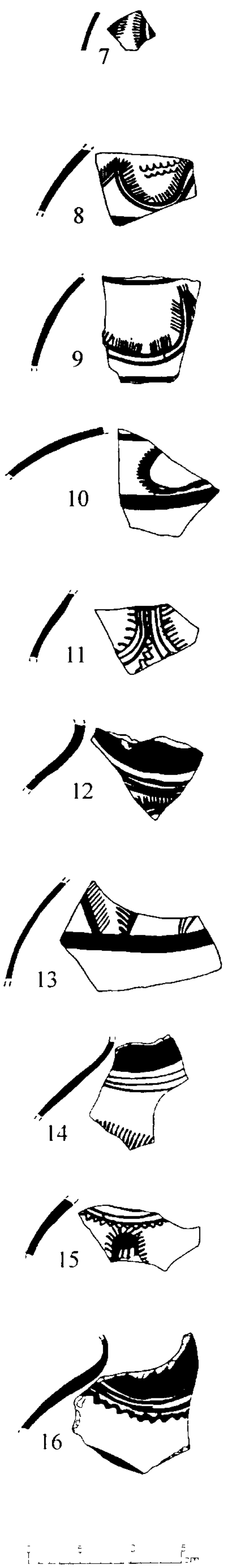


Fig. 40

7. Fragment of a shoulder portion of a vase of red ware, painted with black sun-like design, of fine fabric, showing an oxidized core. From a late level of Period I.

8. Fragment of a shoulder portion of a vase of red ware, painted with black double wavy lines and comb-like design, of medium fabric, and showing an oxidized core. From a mid-level of Period I.

9. Fragment of a shoulder portion of a vase of red ware, painted with black combed frond-like design, of fine fabric, showing an oxidized core. From a late level of Period I.

10. Fragment of a shoulder portion of red ware, painted with black combed frond design, of medium fabric, showing an oxidized core. From a late level of Period I.

11. Fragment of a shoulder portion of a vase of buffish red ware, painted with black combed fronds and a wavy design, of fine fabric, showing an oxidized core. From a mid-level of Period I.

12. Fragment of a shoulder portion of a vase of red ware, painted with black thick and thin bands and a sun-like rayed design, of medium fabric, showing an oxidized core. From an early level of Period I.

13. Fragment of a shoulder portion of a vase of red ware, painted with black band and a partial frond-like design, of medium fabric, showing an oxidized core. From an early level of Period I.

14. Fragment of an upper portion of a vase of red ware, painted with black thick and thin bands and a frond-like design, of medium fabric, showing an oxidized core. From a late level of Period I.

15. Fragment of a shoulder portion of a vase of red ware, painted with black bands and a line of continuous wavy line and some floral design, of medium fabric, showing an oxidized core. From a mid-level of Period I.

16. Fragment of an upper portion of a vase of red ware, painted with thick and thin bands and wavy line of medium fabric, showing an oxidized core. From a mid-level of Period I.

17. Fragment of a shoulder portion of a vase of red ware, painted with black band, continuous wavy line and group of sigmas, within triple semi-circles, of fine fabric, showing an oxidized core. From a late level of Period I.

18. Fragment of an upper portion of a vase of red ware, painted with black bands and a continuous wavy line, of fine fabric, showing an oxidized core. From a mid-level of Period I.

19. Fragment of a shoulder portion of a vase of buffish red ware, painted with black double wavy lines and a band, of fine fabric, showing an oxidized core. From an early level of Period I.

20. Fragment of a shoulder portion of a vase of red ware, painted with black bands and wavy lines (partially available), of fine fabric showing an oxidized core. From an early level of Period I.

21. Fragment of a shoulder portion of red ware, painted with black bands and a continuous wavy lines, of medium fabric, showing an oxidized core. From a late level of Period I.

22. Fragment of a shoulder portion of a vase of red ware, painted with black bands and continuous wavy lines, of medium fabric, showing an oxidized core. From an early level of Period I.

23. Fragment of an upper portion of a small vase of red ware, painted with black and white bands and in-between wavy lines, of fine fabric, showing an oxidized core. From a late level of Period I.

24. Fragment of a shoulder portion of a vase of red ware with brown slip, painted with black and white bands and wavy lines, of medium fabric, showing an oxidized core. From a late level of Period I.

25. Fragment of a shoulder portion of red ware, painted with black bands, double wavy lines, and bands with triple semi-circles, of medium fabric, showing an oxidized core. From a late level of Period I.

26. Fragment of an upper portion of a vase of red ware, painted with thick and thin black bands, continuous wavy lines, double semi-circle and dot in-between, of fine fabric, showing an oxidized core. From a late level of Period I.

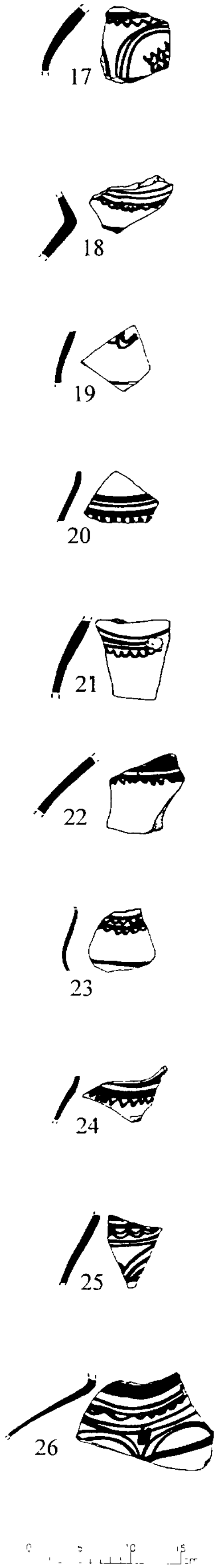


Fig. 40

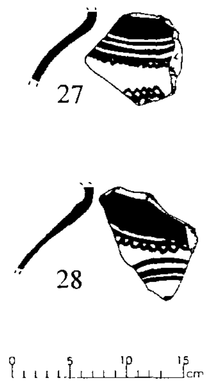


Fig. 40

27. Fragment of a shoulder portion of a vase of red ware, painted with black thick, zigzag, thin bands and a closely placed cluster of wavy lines below, of medium fabric, showing an oxidized core. From a late level of Period I.

28. Fragment of an upper portion of a vase of red ware, painted with black thick and thin bands below wavy lines and triple semi-circles, of medium fabric, showing an oxidized core. From a late level of Period I.

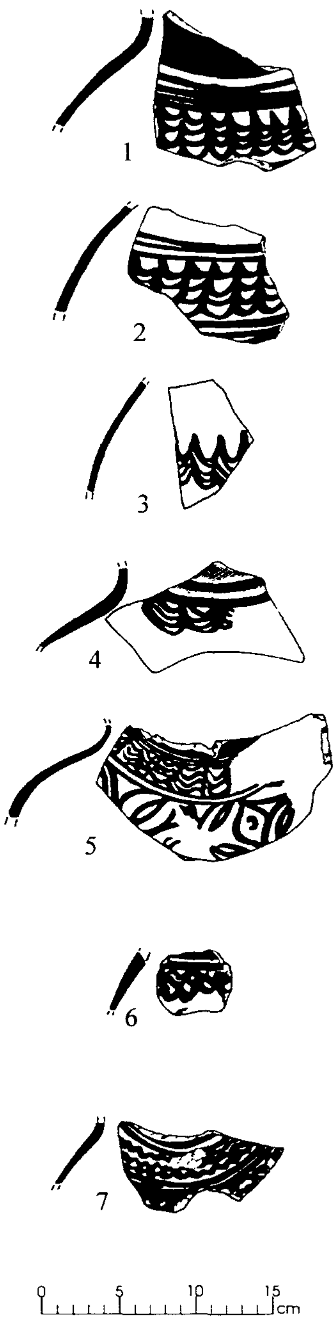


Fig. 41

FIG. 41

1. Fragment of an upper portion of a vase of red ware, painted with black thick and thin bands and having a group of wavy lines below the bands, of medium fabric, showing an oxidized core. From a late level of Period I.

2. Fragment of a shoulder portion of a vase of red ware, painted with black bands and a group of wavy lines below the bands, of medium fabric, showing an oxidized core. From a late level of Period I.

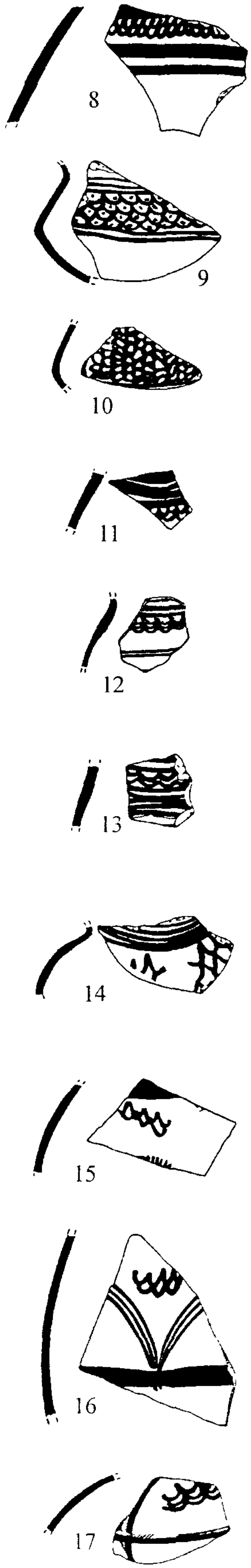
3. Fragment of a shoulder portion of a vase of red ware, painted with five rows of wavy lines in black, of fine fabric showing an oxidized core. From a late level of Period I.

4. Fragment of a shoulder portion of a vase of red ware, painted with black and white bands and rows of four wavy lines below, of fine fabric, showing an oxidized core. From a late level of Period I.

5. Fragment of a shoulder portion of red ware, painted in black showing a group of wavy lines within horizontal bands, and below the band, flower-like pattern, of medium fabric, showing an oxidized core. From an early level of Period I.

6. Fragment of a lower portion of a vase of red ware, painted with black bands and rows of three wavy lines, of fine fabric, showing an oxidized core. From a late level of Period I.

7. Fragment of a shoulder portion of a jar of red ware, painted with black bands, a group of wavy lines and bands below the wavy lines, of fine fabric, showing an oxidized core. From a late level of Period I.



8. Fragment of a shoulder portion of a vase of red ware, painted with double wavy lines and bands below the wavy lines in black , of medium fabric, showing an oxidized core. From an early level of Period I.

9. Fragment of a carinated *handi* of red ware with broken rim, painted with fish-scale design between horizontal bands in black, of fine fabric, showing an oxidized core. From an early level of Period I.

10. Fragment of a middle portion of a carinated *handi* painted in black with fish-scale design, of medium fabric, showing an oxidized core. From an early level of Period I.

11. Fragment of an upper portion of a vase of red ware, painted with black having bands and fish-scale design below the bands, of medium fabric, showing an oxidized core. From a late level of Period I.

12. Fragment of an upper portion of a vase of red ware, painted with black and white bands and wavy lines below the bands, of fine fabric showing an oxidized core. From a late level of Period I.

13. Fragment of a middle portion of a vase of dull red ware, painted with black bands and a panel of wavy line, of fine fabric, showing an oxidized core. From a late level of Period I.

14. Fragment of an upper portion of a vase of red ware, painted in black showing bands and fish-scale design below the bands, of fine fabric, showing an oxidized core. From an early level of Period I.

15. Fragment of a middle portion of a vase of red ware, painted with black bands and double wavy lines with some strokes below the wavy lines, of fine fabric, showing an oxidized core. From an early level of Period I.

16. Fragment of an upper portion of a vase of red ware, painted with black having double wavy lines in-between triple circle, arch and a thick band, of medium fabric, showing an oxidized core. From an early level of Period I.

17. Fragment of a middle portion of a vase of red ware, painted with black and white band, circle having a group of triple wavy lines in the centre, of medium fabric showing an oxidized core. From a mid-level of Period I

Fig. 41

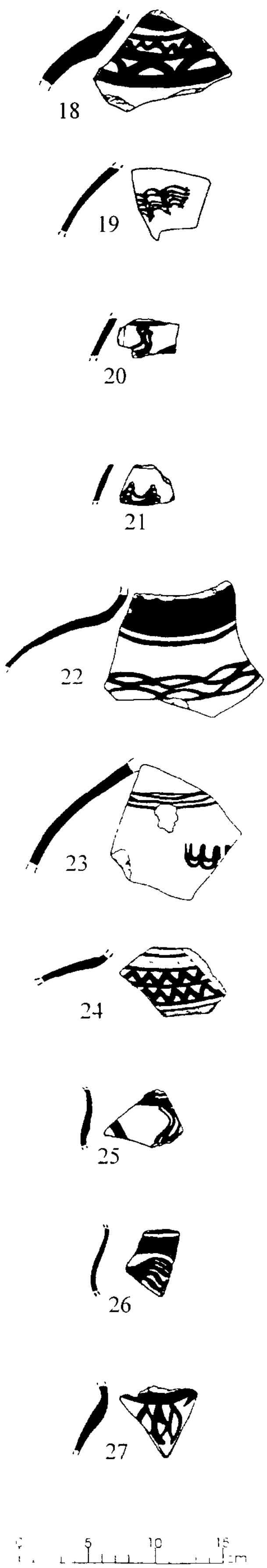


Fig. 41

18. Fragment of a middle portion of a vase of red ware, painted with black having thick and thin bands, wavy lines and semi-circles, of medium fabric, showing an oxidized core. From a late level of Period I.

19. Fragment of a middle portion of a vase of red ware, painted in black and white with a group of wavy lines, of fine fabric, showing an oxidized core. From a mid-level of Period I.

20. Fragment of a middle portion of a vase of red ware, painted with black sigma-like design, of fine fabric, showing an oxidized core. From a mid-level of Period I.

21. Fragment of a middle portion of a vase of red ware, painted with black wavy lines with dots in white, of medium fabric, showing an oxidized core. From a mid-level of Period I.

22. Fragment of an upper portion of a vase of red ware, painted with black thick and thin bands having double chain-like pattern below, of medium fabric, showing an oxidized core. From an early level of Period I.

23. Fragment of an upper portion of a vase of pale red ware, painted with black bands and double wavy lines below, of fine fabric, showing an oxidized core From a late level of Period I.

24. Fragment of a shoulder portion of a vase of red ware, painted with black and white bands and two panels of wavy lines, of fine fabric showing an oxidized core From an early level of Period I.

25. Fragment of an upper portion of a vase of red ware, painted with black bands and sigma-like design, of fine fabric, showing an oxidized core. From a late level of Period I.

26. Fragment of an upper portion of a vase of red ware, painted with black and white thick and thin bands and a few leaf-like design, of fine fabric, showing an oxidized core. From a mid-level of Period I.

27. Fragment of a middle portion of a vase of red ware painted with black band with fish-like design, of medium fabric, showing an oxidized core. From a late level of Period I.

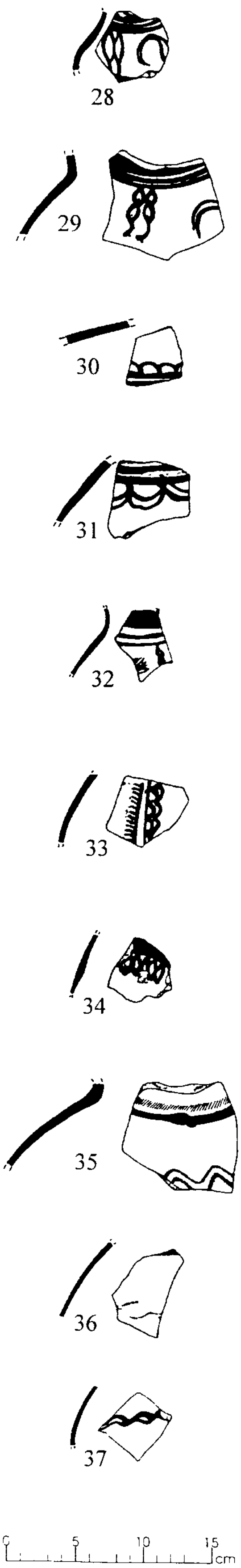


Fig. 41

28. Fragment of an upper part of a vase of red ware, painted in black bands, fish-like design and a double loop, of fine fabric, showing an oxidized core. From a late level of Period I.

29. Fragment of an upper portion of a vase of red ware, painted with black and white bands and vertically hanging fish and a loop, of fine fabric, showing an oxidized core. From an early level of Period I.

30. Fragment of a middle portion of a vase of red ware, painted in black with horizontal bands and running loops on the bands, of medium fabric showing an oxidized core. From a late level of Period I.

31. Fragment of a middle portion of a vase of red ware, painted in black and white bands and double wavy bands, of medium fabric, showing an oxidized core. From a mid-level of Period I.

32. Fragment of an upper portion of a vase of red ware, painted in black and white with bands, a vertical chain and sun-like design, of fine fabric, showing an oxidized core. From an early level of Period I.

33. Fragment of an upper portion of a vase of red ware, painted in black and white with vertical lines having on one side comb-like design while on the other double vertical lines, of fine fabric, showing an oxidized core. From an early level of Period I.

34. Fragment of a middle portion of a vase of red ware, painted in black making a band and bunch of particular designs, of fine fabric, showing an oxidized core. From a mid-level of Period I.

35. Fragment of an upper portion of a vase of red ware, painted with black and white band and wavy white lines, of fine fabric, showing an oxidized core. From a late level of Period I.

36. Fragment of an upper portion of a vase of red ware, painted in white making fish-like design, of fine fabric, showing an oxidized core. From a late level of Period I.

37. Fragment of an upper portion of a vase of red ware, painted in black making double overlapping wavy lines, of fine fabric, showing an oxidized core. From an early level of Period I.

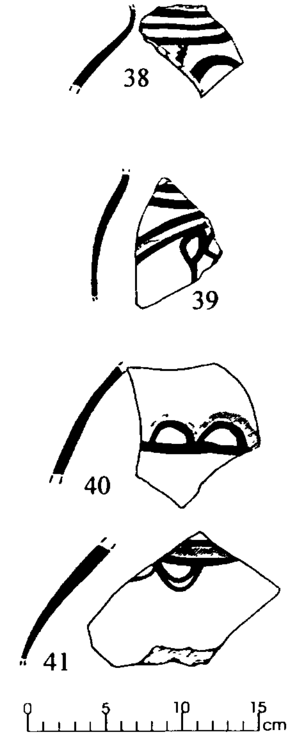


Fig. 41

38. Fragment of an upper portion of a vase of red ware, painted with triple black bands horizontal wavy lines along a vertical line, of fine fabric, showing an oxidized core. From a late level of Period I.

39. Fragment of an upper portion of a vase of red ware, painted in black and white bands and lenticular design inside a semi-circle or arch, of fine fabric, showing an oxidized core. From a mid-level of Period I.

40. Fragment of a middle portion of a vase of red ware, painted in black and white semi-circles above a black band, of fine fabric, showing an oxidized core. From a late level of Period I.

41. Fragment of a middle portion of a vase of red ware, painted with black and white bands and double loops below the bands, of fine fabric, showing an oxidized core. From a late level of Period I.

FIG. 42

1. Fragment of a middle portion of a vase of red ware, painted in black in the upper part followed by three groups of horizontal bands, filled by small verticals and criss-cross design below, of fine fabric, showing an oxidized core. From a late level of Period I.
2. Fragment of a middle portion of a vase of red ware, painted with black bands and chequers filling the space in-between the arches, of medium fabric, showing an oxidized core. From a mid-level of Period I.
3. Fragment of a middle portion of a vase of red ware, painted in black having latticed designs between the arches groups of verticals inside the arches, of fine fabric, showing an oxidized core. From a late level of Period I.
4. Fragment of a middle portion of a vase of red ware, painted in black with thick and thin bands panelled by running arches having zigzag lines made between two vertical lines inside and latticed space in-between and arches, filled by a chequer pattern, of medium fabric, showing an oxidized core. From a late level of Period I.

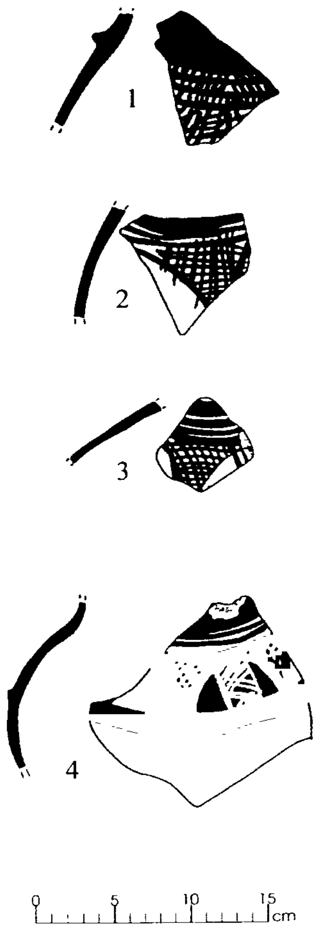


Fig. 42

5. Fragment of a middle portion of a vase of red ware, painted with black thick and thin bands, vertical strokes inside the arches and latticed triangle in-between, filled with chequer pattern, of fine fabric, showing an oxidized core. From an early level of Period I.

6. Fragment of a middle portion of a vase of red ware, painted in black showing arch with latticed diamonds in triangular space (in-between the arch) and a sigma in the centre, of medium fabric, showing an oxidized core. From an early level of Period I.

7. Fragment of an upper portion of a vase of red ware, painted in black showing panels of check design in-between a horizontal band, of medium fabric showing an oxidized core. From a late level of Period I.

8. Fragment of an upper portion of a vase of red ware, painted with black and white horizontal bands and latticed triangle filled with criss-cross design and white strokes in-between the arches and a eye-like design in the centre, of fine fabric, showing an oxidized core. From a late level of Period I.

9. Fragment of an upper portion of a vase of red ware, painted with black and white horizontal bands, vertical lines in the arches and latticed triangle filled with criss-cross design in-between, of medium fabric, showing an oxidized core. From an early level of Period I.

10. Fragment of an upper portion of a vase of red ware, painted with black and white horizontal and vertical lines and latticed triangle in-between the arches filled with criss-cross design, of fine fabric, showing an oxidized core. From a mid-level of Period I.

11. Fragment of an upper portion of a vase of red ware, painted with black and white bands and oblique lines in the arch and latticed triangles filled with criss-cross design in-between, of fine fabric, showing an oxidized core. From a late level of Period I.

12. Fragment of an upper portion of a vase of red ware, painted with black and white making horizontal and oblique lines inside the arches and in-between latticed triangles, filled with criss-cross design, of medium fabric, showing an oxidized core. From a late level of Period I.

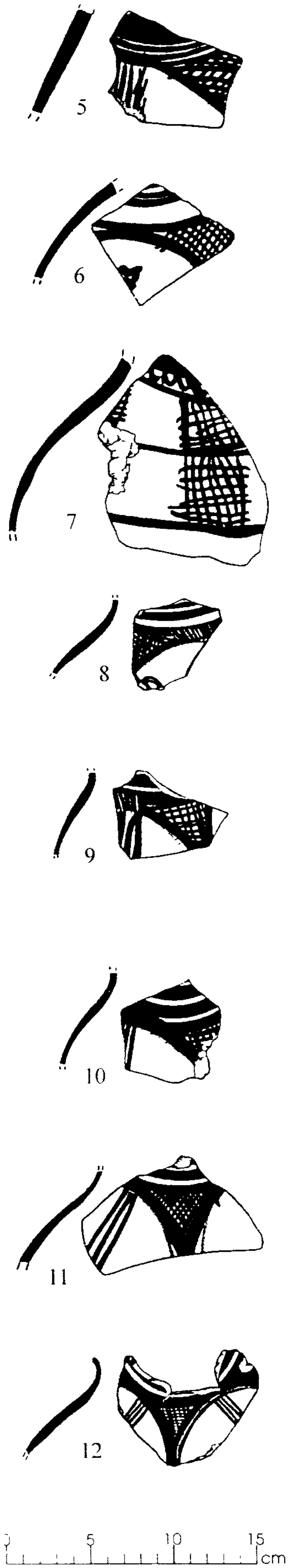
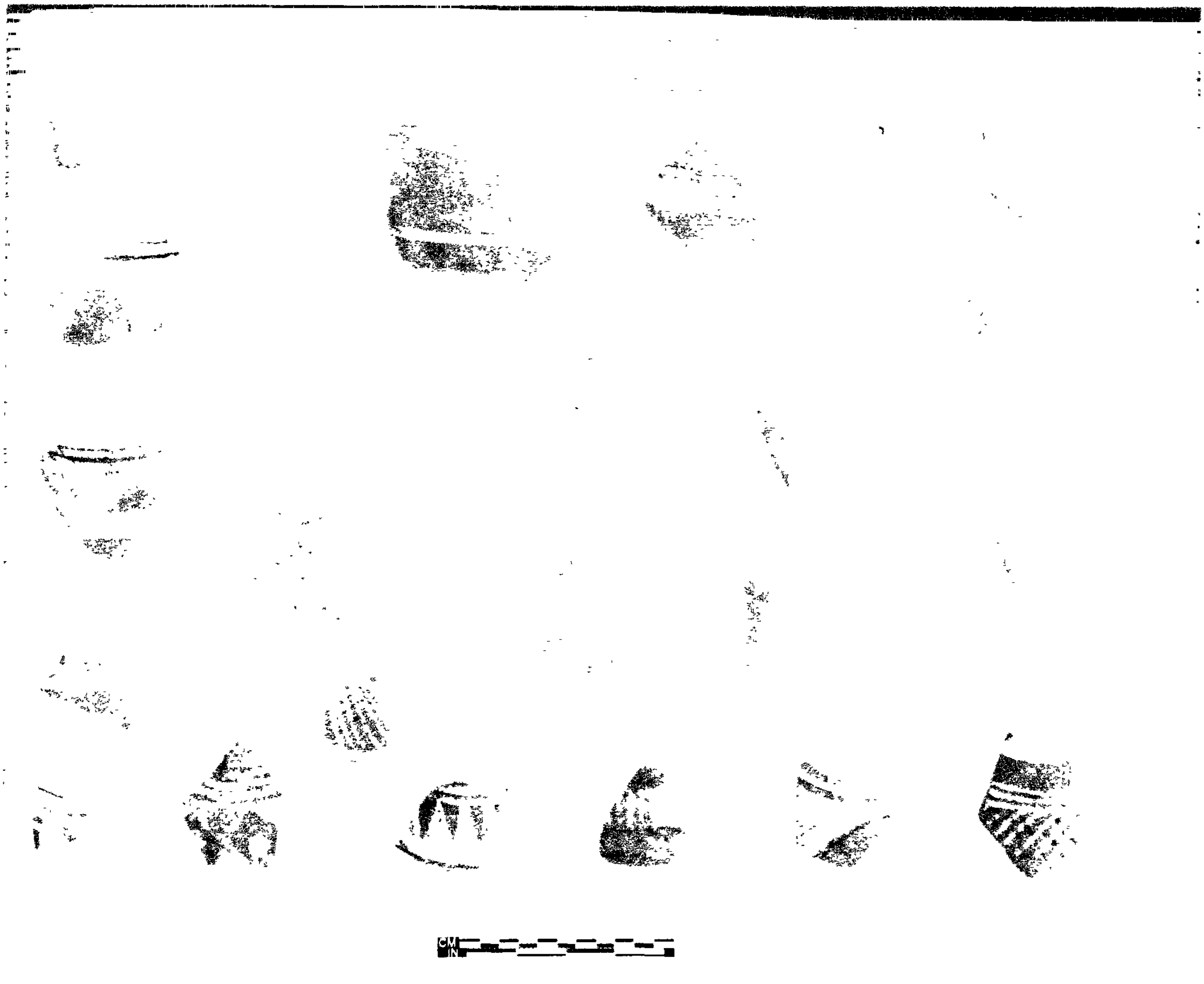


Fig. 42



Pl. XXVI. *painted pottery (assorted) Fabric A. See pp. 158-164*

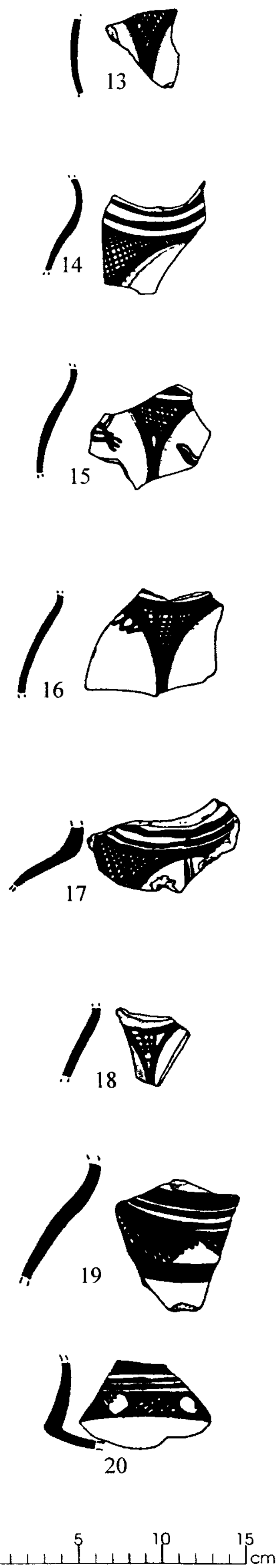


Fig. 42

13. Fragment of a middle portion of a vase of red ware, painted with black and white latticed triangle filled with criss-cross design in-between the arches, of fine fabric, showing an oxidized core. From an early level of Period I.

14. Fragment of an upper portion of a vase of red ware, painted with black and white horizontal bands and latticed triangle filled with criss-cross design in-between the arches, of fine fabric, showing an oxidized core. From an early level of Period I.

15. Fragment of an upper portion of a vase of red ware, painted with black and white bands and latticed triangle in-between filled with criss-cross design showing two bird-like design inside the arches, of fine fabric, showing an oxidized core. From a late level of Period I.

16. Fragment of an upper portion of a vase of red ware, painted with black showing black and white bands and latticed triangles in-between the arches, filled with criss-cross design and a small loop-like design hanging from the arch, of medium fabric, showing an oxidized core. From a mid-level of Period I.

17. Fragment of an upper portion of a vase of red ware, painted in black in-between the arches making a latticed triangle, filled with criss-cross design and two vertical lines hanging from the arch inside, of fine fabric, showing an oxidized core. From a late level of Period I.

18. Fragment of an upper portion of a vase of red ware, painted in black and white bands and latticed triangle in-between the arches, of medium fabric, showing an oxidized core. From an early level of Period I.

19. Fragment of a upper portion of a vase of red ware painted with black bands, alternately making running triangles and criss-cross design, of medium fabric, showing an oxidized core. From a mid-level of Period I.

20. Fragment of an lower portion of a vase of red ware having carination on the base, painted with black and white bands and lenticular design filled with criss-cross design, of fine fabric, showing an oxidized core. From an early level of Period I.

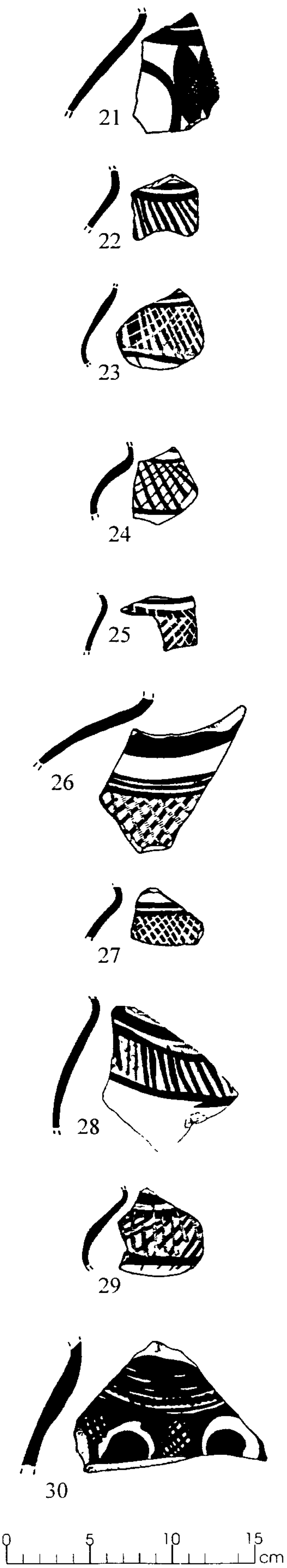


Fig. 42

21. Fragment of a middle portion of a vase of red ware, painted in black and white making horizontal bands and criss-cross lenticular pattern, of medium fabric, showing an oxidized core. From a mid-level of Period I.

22. Fragment of a middle portion of a vase of red ware, painted in black and white with horizontal and criss-cross bands, of fine fabric, showing an oxidized core. From an early level of Period I.

23. Fragment of an upper portion of a vase of red ware, painted in black and white with bands and criss-cross design, of fine fabric, showing an oxidized core. From a late level of Period I.

24. Fragment of an upper portion of a vase of red ware, painted in black and white with bands and criss-cross design, of fine fabric, showing an oxidized core. From a late level of Period I.

25. Fragment of an upper portion of a vase of red ware, painted in black and white with bands and criss-cross design, of medium fabric, showing an oxidized core. From an early level of Period I.

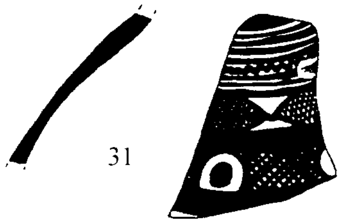
26. Fragment of an upper portion of a vase of red ware, painted in black and white with bands and criss-cross design, of fine fabric, showing an oxidized core. From an early level of Period I.

27. Fragment of a middle portion of a vase of red ware, painted in black and white with horizontal bands and criss-cross design, of fine to medium fabric, showing an oxidized core. From a late level of Period I.

28. Fragment of a middle portion of a vase of red ware, painted with black horizontal bands and criss-cross design, of fine fabric, showing an oxidized core. From an early level of Period I.

29. Fragment of a middle portion of a vase of red ware, painted with black horizontal bands, wavy line, circle and in-between criss-cross design, of medium fabric, showing an oxidized core. From a late level of Period I.

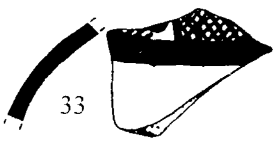
30. Fragment of a middle portion of a vase of red ware, painted in black making horizontal and wavy lines, fish-like design filled by criss-cross in the upper register and double circle in-between criss-cross design, of medium fabric showing an oxidized core. From a late level of Period I.


31

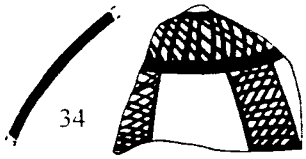
31. Fragment of a middle portion of a vase of red ware, painted in black making horizontal bands, wavy lines having a dot in-between triangles filled by criss-cross design, of fine to medium fabric, showing an oxidized core. From a late level of Period I.


32

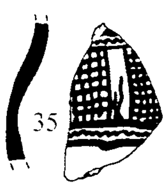
32. Fragment of a middle portion of a vase of red ware, painted in black, having dot, triangles with criss-cross design and a band below, of medium fabric, showing an oxidized core. From a late level of Period I.


33

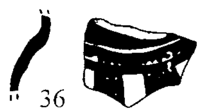
33. Fragment of a middle portion of a vase of red ware, painted in black making two vertical panels, one of criss-cross design while the other panel is broken on the top, of medium fabric, showing an oxidized core. From a late level of Period I.


34

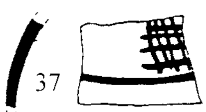
34. Fragment of a middle portion of a vase of red ware, painted in black showing horizontal bands filled with criss-cross design and below between vertical panels of chequers, of medium fabric, showing an oxidized core. From a late level of Period I.


35

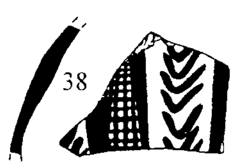
35. Fragment of a middle portion of a vase of red ware, painted in black showing a wavy line between two roughly horizontal bands and two vertical running panels of chequer designs, of medium fabric, showing an oxidized core. From a late level of Period I.


36

36. Fragment of a middle portion of a vase of red ware, painted in black showing criss-cross design and a band, of fine to medium fabric, showing an oxidized core. From a late level of Period I.


37

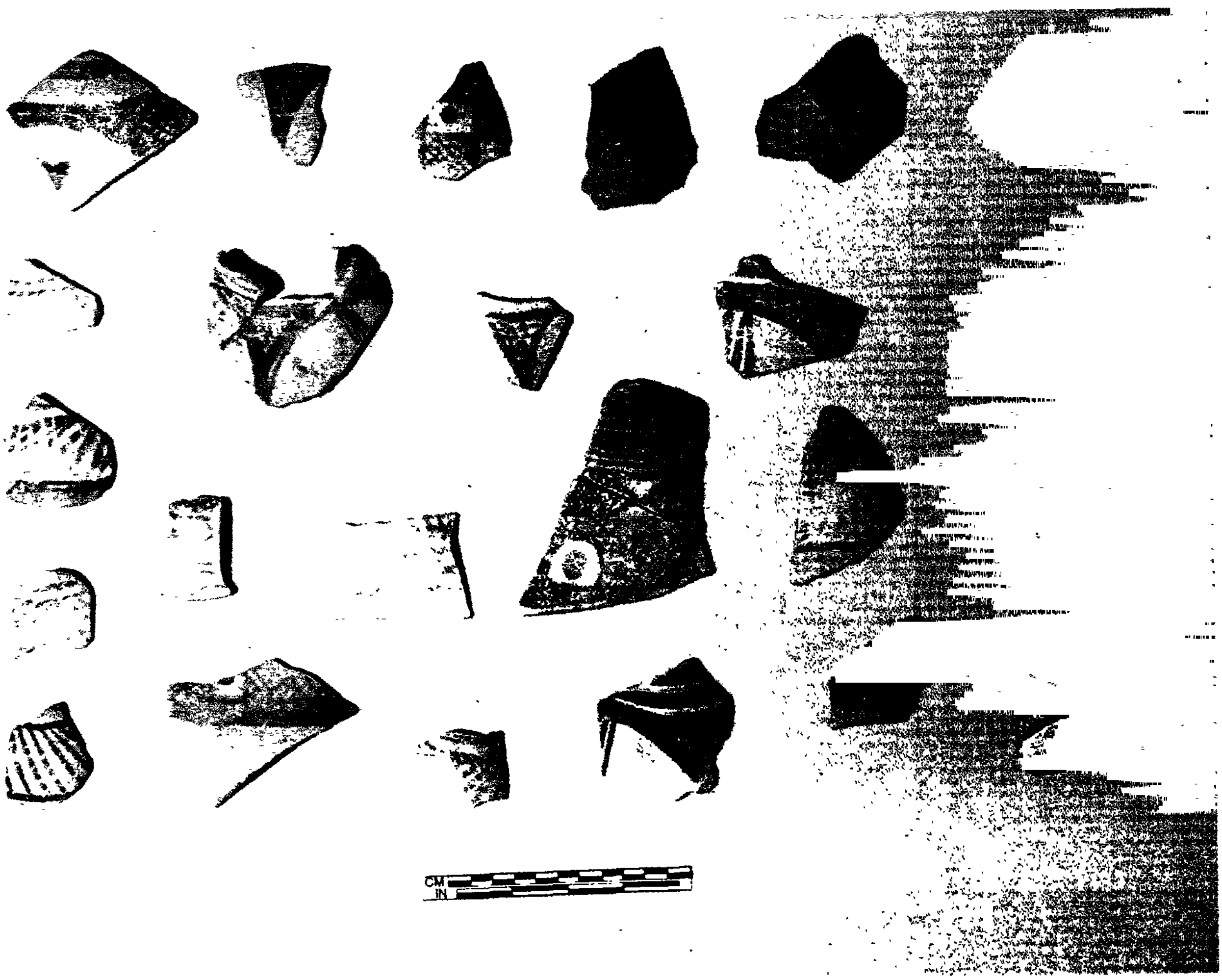
37. Fragment of a middle portion of a vase painted in black with a chequer design and a horizontal band below, of medium fabric. From a late level of Period I.


38

38. Fragment of a middle portion of a vase of red ware, painted in black showing running panels of chequers and a vertical panel of V-like running design of medium fabric, showing an oxidized core. From a late level of Period I.


39

39. Fragment of a middle portion of a vase of red ware, painted in black showing horizontal band, wavy lines and a group of triangles filled in with criss-cross design, of medium fabric, showing an oxidized core. From a late level of Period I



Pl. XXVII : *painted pottery (assorted) Fabric A. See pp. 160-166*



Fig. 42

40. Fragment of a middle portion of a vase of red ware, painted in black showing horizontal bands and in-between a triangle filled in with criss-cross design, of medium fabric, showing an oxidized core. From a late level of Period I.

41. Fragment of a middle portion of a vase of red ware, painted in black showing horizontal bands and in-between a row of triangles filled in with criss-cross design, of medium fabric, showing an oxidized core. From a late level of Period I.

42. Fragment of a middle portion of a vase of red ware, painted in black showing a dot and band in-between a row of triangles filled in with criss-cross design, of medium fabric, showing an oxidized core. From a late level of Period I.

43. Fragment of a middle portion of a vase of red ware, painted in black showing horizontal bands, in-between a row of triangles filled in with criss-cross design, of medium fabric, showing an oxidized core. From a late level of Period I.

44. Fragment of a middle portion of a vase of red ware, painted in black showing boxes of criss-cross design making a chequer pattern having a dot in the central box, of medium fabric, showing an oxidized core. From a late level of Period I.

45. Fragment of an upper portion of a vase of red ware, painted in black making a panel of criss-cross design between horizontal bands, of medium fabric, showing an oxidized core. From a late level of Period I.

46. Handle of red ware, painted in black showing panels of criss-cross design and a group of semi-circles below, of medium fabric, showing an oxidized core. From a late level of Period I.

FIG. 43

1. Fragment of an upper portion of a jar of red ware, painted in black on red slip having a floral design, horizontal bands and roughly made semi-circle, of medium fabric, showing an oxidized core. From a late level of Period I.



Fig. 43

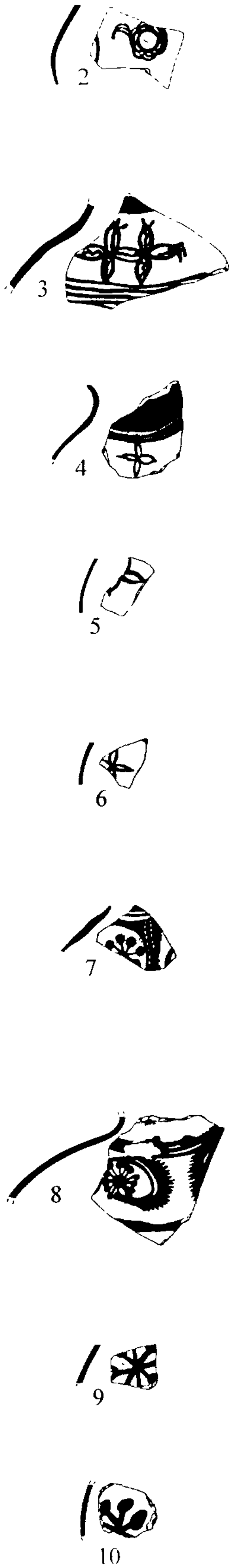


Fig 43

2. Fragment of a middle portion of a jar of red ware painted in black and white on red slip, making a floral design and vertical line in one corner, of fine fabric, showing an oxidized core. From a late level of Period I.

3. Fragment of a middle portion of a jar of red ware with red slip, painted in black making continuous four-petalled floral design and horizontal bands below, of medium fabric, showing an oxidized core. From a late level of Period I.

4. Fragment of an upper portion of a jar of red ware, painted in black and white on red slip, making horizontal bands and below the bands painted four-petalled floral design, of medium fabric, showing an oxidized core. From an early level of Period I.

5. Fragment of a middle portion of a jar of red ware, painted in black on red slip, making a floral design, of fine fabric, showing an oxidized core. From a late level of Period I.

6. Fragment of a middle portion of a jar of red ware, painted in black on red slip, making a floral design, of fine fabric, showing an oxidized core. From a late level of Period I.

7. Fragment of a middle portion of a jar of red ware painted in black on red slip with horizontal bands, continuous semi-circle. pellet ended radiating lines ending in solid disc with white dots on the black, of medium fabric, showing an oxidized core. From a late level of Period I.

8. Fragment of an upper portion of a jar of red ware, painted in black on red slip with horizontal bands, radiating lines ending in solid discs, encircled by double circle and another circle on the right side and a band below, of medium fabric, showing an oxidized core. From a late level of Period I.

9. Fragment of a middle portion of a jar of red ware, painted in black on red slip, making radiating lines ending in solid discs, of fine fabric, showing an oxidized core. From an early level of Period I.

10. Fragment of a middle portion of a jar of red ware, painted in black on red slip, making radiating lines ending in solid pallets, of fine fabric, showing an oxidized core. From a late level of Period I.



Fig. 43

11. Fragment of an upper portion of a jar of red ware, painted in black, making radiating lines ending in solid discs, of fine fabric, showing an oxidized core. From an early level of Period I.

12. Fragment of an upper portion of a jar of red ware, painted in black and white, making horizontal bands and below radiating lines ending in discs, of medium fabric, showing an oxidized core. From a late level of Period I.

13. Fragment of an upper portion of a jar of red ware with light brown slip, painted in black, making horizontal bands and below portion of design showing radiating lines of horizon ending in solid disc, of fine fabric, having an oxidized core. From an early level of Period I.

14. Fragment of a middle portion of a jar of red ware, painted on light red slip in black, making a dot above horizontal band, of fine fabric, showing an oxidized core. From a late level of Period I.

15. Fragment of an upper portion of a jar of red ware, painted in black on light red slip, making horizontal bands below with four radiating lines ending in solid discs, emanating from a central disc, of medium fabric, showing an oxidized core. From a late level of Period I.

16. Fragment of a middle portion of a jar of red ware, painted in black with light red slip, making an oblique line cut by another oblique line with a solid disc, of medium fabric, showing an oxidized core. From an early level of Period I.

17. Fragment of an upper portion of a jar of red ware, painted in black making horizontal bands, an arch-like design with a round dot at centre, of fine fabric, showing an oxidized core. From an early level of Period I.

18. Fragment of a middle portion of a jar of red ware, painted in black on brown slip, making a stylistic Maltese cross, of fine fabric, showing an oxidized core. From a late level of Period I.

19. Fragment of an upper portion of a jar of red ware, painted in black and white on a light brown slip, making horizontal bands and a part of an inderminate design, of fine fabric, showing an oxidized core. From a late level of Period I.

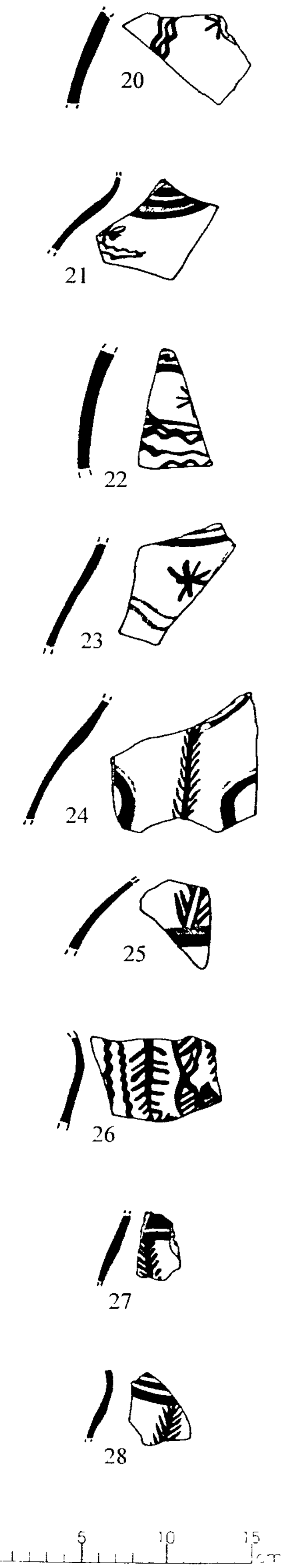


Fig. 43

20. Fragment of a middle portion of a jar of red ware, painted in black making a rayed design and on the left side vertical wavy line and a chain-like design, of medium fabric, showing an oxidized core. From a late level of Period I.

21. Fragment of an upper portion of a jar of red ware, painted in black on bright red slip horizontal bands and a hind part of a bird on white double wavy lines, of fine fabric, showing an oxidized core. From an early level of Period I.

22. Fragment of a middle portion of a jar of red ware, painted in black on red slip, making vertical lines in-between irregular wavy lines and on the top a partial sun-like design, of medium fabric, showing an oxidized core. From a late level of Period I.

23. Fragment of a middle portion of a jar of red ware, painted in black and white making horizontal bands and in-between a star-like design, of fine fabric, showing an oxidized core. From a late level of Period I.

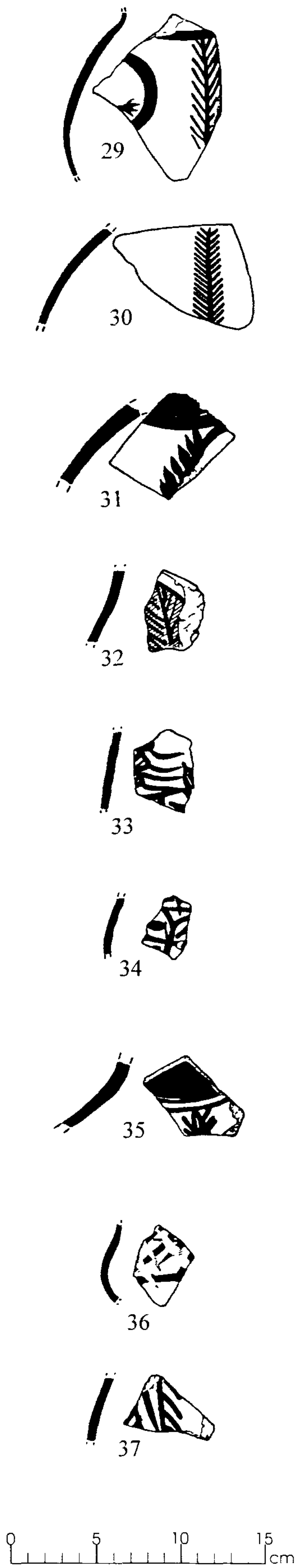
24. Fragment of a middle portion of a jar of red ware with light red slip, painted in black and white, making probably loop-like designs and in-between a corn plant, of medium fabric, showing an oxidized core. From a late level of Period I.

25. Fragment of a middle portion of a jar of red ware, painted in black and white, making a corn-like plant over two horizontal bands, of fine fabric, showing an oxidized core. From a mid-level of Period I.

26. Fragment of a middle portion of a jar of red ware, painted in black, making vertically zigzag lines, a plant with leaves and hatched leaves of a creeper by oblique lines, of fine fabric, showing an oxidized core. From a late level of Period I.

27. Fragment of a middle portion of a jar of red ware, painted in black, making horizontal bands and a wheat-like plant, of fine fabric, showing an oxidized core. From a late level of Period I.

28. Fragment of a middle portion of a jar of red ware, painted on fine red slip in black and white, making horizontal bands and a wheat-like plant, of fine fabric, showing an oxidized core. From a late level of Period I.



29. Fragment of an upper portion of a jar of red ware, with red slip painted in black, making a horizontal band above a wheat-like plant, circle and probably a design with hind part of a spider, of fine fabric, showing an oxidized core. From an early level of Period I.

30. Fragment of a middle portion of a jar of red ware, painted in black, making a wheat-like plant, of fine fabric, showing an oxidized core. From an early level of Period I.

31. Fragment of a middle portion of a jar of red ware, painted in black on bright red slip, making thick horizontal band and a branch with beautiful leaves, of medium fabric, showing an oxidized core. From a late level of Period I.

32. Fragment of a middle portion of a jar of red ware, with red slip, painted in black and white making a *pipal*-like leaf with white outline and veins on the leaf with black colour, of fine fabric, showing an oxidized core. From an early level of Period I.

33. Fragment of a middle portion of a jar of red ware, painted in black on red slip, making leaf-like design on a branch, of fine fabric, showing an oxidized core. From a late level of Period I.

34. Fragment of a middle portion of a jar of red ware, painted in black on red slip, making leaves with branches, of fine fabric, showing an oxidized core. From a late level of Period I.

35. Fragment of a middle portion of a jar of red ware, painted in black on red slip, making bands and a cactus-like design below the bands, of medium fabric, showing an oxidized core. From an early level of Period I.

36. Fragment of a middle portion of a jar of red ware, painted in black and white, making a criss-cross design, of fine fabric, showing an oxidized core. From an early level of Period I.

37. Fragment of a middle portion of a jar of red ware, painted in black and white, on red slip, making vertical and oblique lines, of medium fabric, showing an oxidized core. From a mid-level of Period I.

Fig. 43

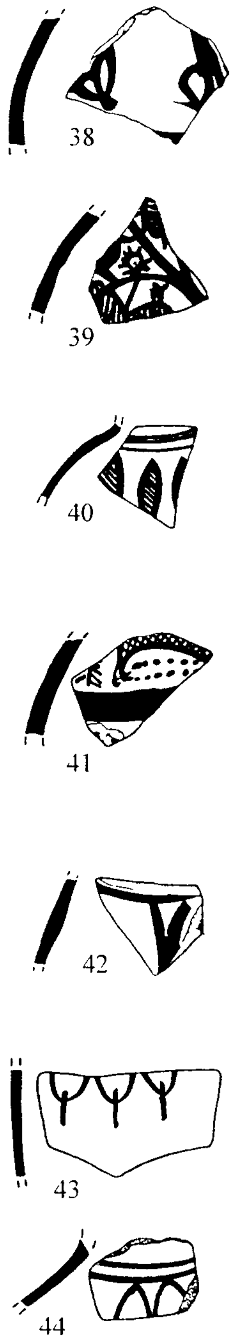


Fig. 43

38. Fragment of a middle portion of a jar of red ware, painted in black on red slip, making floral design, of medium fabric, showing an oxidized core. From a late level of Period I.

39. Fragment of a middle portion of a jar of red ware, painted in black on bright red slip, making a tree having branches and *Pipal* leaves and in-between sun flower-like design, of medium fabric, showing an oxidized core. From a late level of Period I.

40. Middle portion of a jar of red ware, painted in black and white on brown slip, making horizontal bands and filled leaves, of medium fabric, showing an oxidized core. From a late level of Period I.

41. Fragment of a middle portion of a jar of red ware, painted in black on red slip, making a panel of small plant, criss-cross design with dots inside the frond above horizontal thick band, of medium fabric, showing an oxidized core. From a late level of Period I.

42. Fragment of a middle portion of a jar of red ware, painted in black on red slip, making below a horizontal band a roughly triangular design, of medium fabric, showing an oxidized core. From a late level of Period I.

43. Fragment of a middle portion of a jar of red ware, painted in black on red, making a running cactus-like designs, of fine fabric, showing an oxidized core. From a late level of Period I.

44. Fragment of a middle portion of a jar of red ware, painted in black on red slip, making horizontal bands and below stylistic leaves of fine fabric, showing an oxidized core. From an early level of Period I.

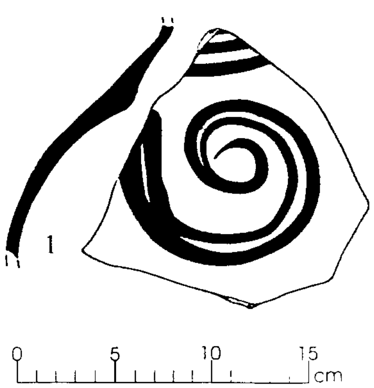
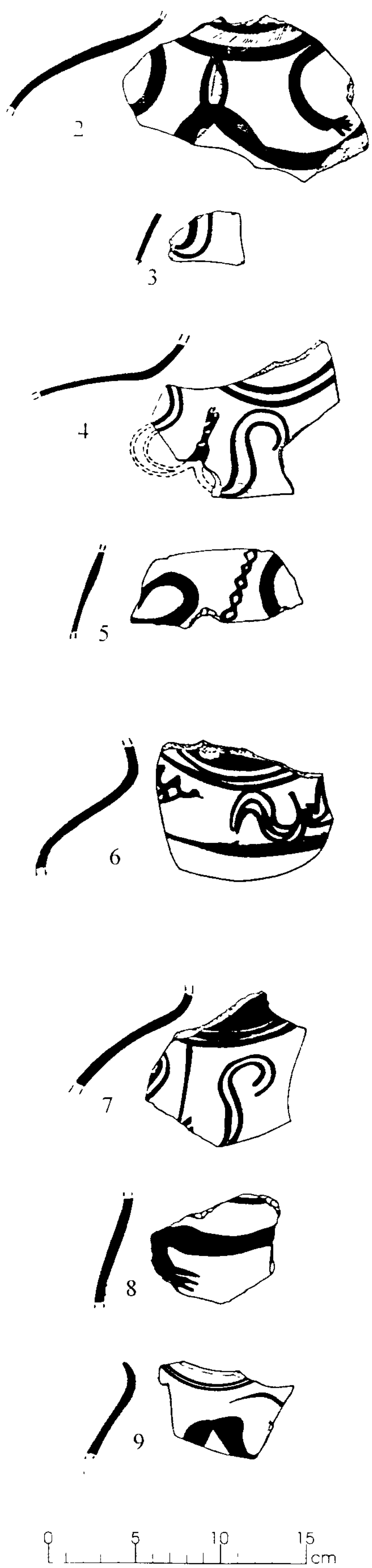


Fig. 44

FIG. 44

1. Fragment of a jar of red ware, painted in black and white on the red slip, making a double frond and black and white bands above, of medium fabric, with an oxidized core. From a mid-level of Period I.



2. Fragment of a shoulder of a jar of red ware, painted in black and white on red slip, making a creeper having a leaf and another with bushy ends, of medium fabric, showing an oxidized core. From a late level of Period I.

3. Fragment of sherd of red ware, painted in black on red wash, making a double loop-like design, of fine fabric, showing an oxidized core. From an early level of Period I.

4. Fragment of a shoulder of a jar of red ware, painted in black and white with horizontal bands on red slip, making a trident-like design (moustache) of fine fabric, showing an oxidized core. From an early level of Period I.

5. Fragment of sherd of a jar of red ware, painted in black on red slip having loops on either sides and a oblique chain running in-between, of fine fabric and showing an oxidized core. From a late level of Period I.

6. Fragment of a shoulder part of a jar of red ware, painted in black on red slip, making horizontal bands and in-between having a trident-like design consisting of two groups of wavy lines and a horizontal band below the trident, of medium fabric, showing an oxidized core. From a late level of Period I.

7. Fragment of a shoulder portion of a jar of red ware, painted in black and white on red slip, making thick and thin horizontal bands and a trident-like design having double arms below the bands, of fine fabric, showing an oxidized core. From an early level of Period I.

8. Fragment of a sherd of a jar of red ware, painted in black showing horizontal band and frond with bushy end of medium fabric, showing an oxidized core. From a late level of Period I.

9. Fragment of an upper portion of a jar of red ware, painted in black making thin horizontal bands and thick moustache-like design (bwken), of medium fabric, showing an oxidized core. From a late level of Period I.

Fig 44

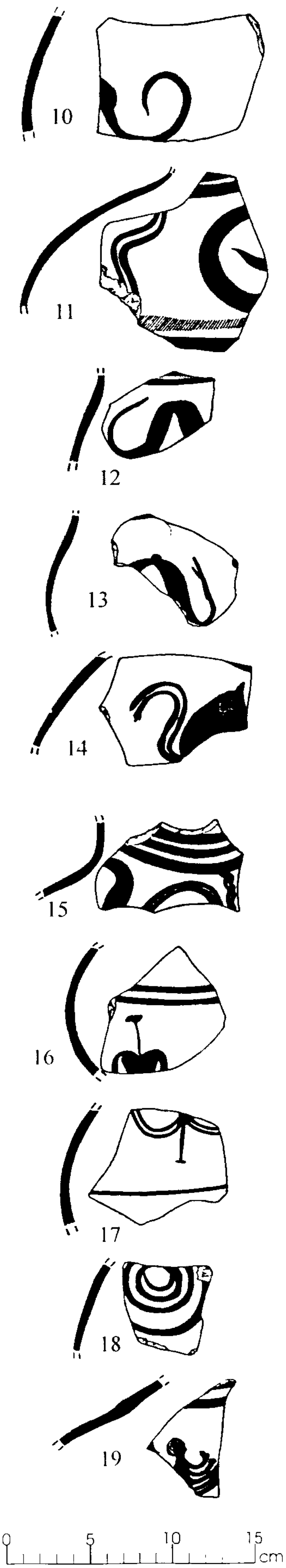


Fig. 44

10. Fragment of a middle portion of a jar of red ware, painted in black on red slip, making a mustache-like design of fine fabric showing an oxidized core. From a mid-level of Period I.

11. Fragment of an upper portion of a jar of red ware, painted in black and white, making horizontal lines on the upper and the lower sides and in-between half circle having a stroke in the centre and double wavy lines, of medium fabric, showing an oxidized core. From a mid-level of Period I.

12. Fragment of a middle portion of a jar of red ware, painted in black and white bands and a partial remains of a mustache design, of medium fabric, showing an oxidized core. From an early level of Period I.

13. Fragment of a middle portion of a jar of red ware, painted in black on buff slip, making a frond with branching at the end, of fine fabric, showing an oxidized core. From a late level of Period I.

14. Fragment of a middle portion of a jar of red ware, painted in black showing a moustache-like design, of fine fabric, showing an oxidized core. From a mid-level of Period I.

15. Fragment of an upper portion of a jar of red ware, painted in black and white with bands, vertical chain, semi-circle and a loop, of fine fabric, showing an oxidized core. From a late level of Period I.

16. Fragment of a middle portion of a jar of red ware, painted in black on red slip, making horizontal bands and a flower, of fine fabric, showing an oxidized core. From an early level of Period I.

17. Fragment of a middle portion of a jar of red ware, painted in black making running loops with hanging and a horizontal band below, of fine fabric, showing an oxidized core. From a late level of Period I.

18. Fragment of a middle portion of a jar of red ware, painted in black making four circles on the red slip, of medium fabric, showing an oxidized core. From a middle level of Period I.

19. Fragment of an upper portion of a jar of red ware, painted in black making horizontal bands and a cactus-like plant with branches, of medium fabric, showing an oxidized core. From a mid-level of Period I.

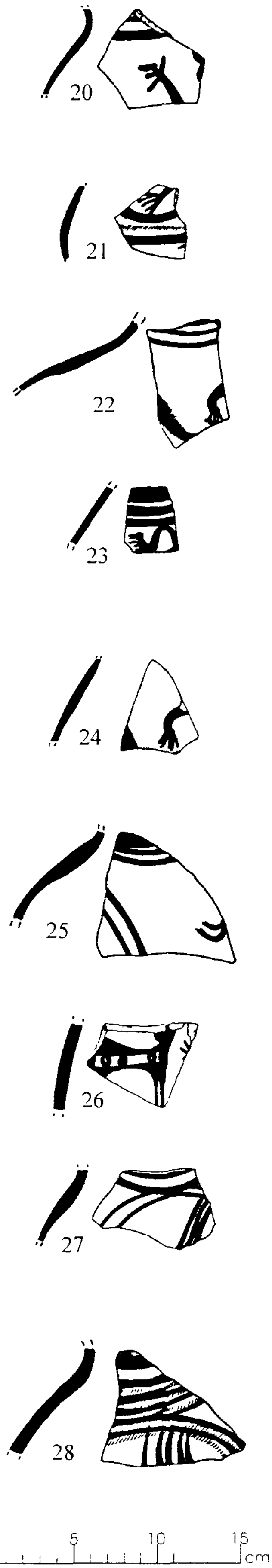


Fig. 44

20. Fragment of an upper portion of a jar of red ware, painted in black and white with horizontal bands and a plant having branches, of fine fabric, and showing an oxidized core. From an early level of Period I.

21. Fragment of a middle portion of a jar of red ware, painted in black and white with bands and branches of a plant, of medium fabric, showing an oxidized core. From a late level of Period I.

22. Fragment of an upper portion of a jar of red ware, painted in black and white showing bands and a frond with bushy end, of medium fabric, having an oxidized core. From an early level of Period I.

23. Fragment of a middle portion of a jar of red ware, painted in black on red slip, making horizontal bands and a frond-like design with branching at the end, of medium fabric, showing an oxidized core. From an early level of Period I.

24. Fragment of a middle portion of a jar of red ware, painted in black on red slip, making an oblique thick line and a frond with branching at the end, of medium fabric, showing an oxidized core. From a late level of Period I.

25. Fragment of an upper portion of a jar of red ware, painted on the red slip in black, making horizontal and oblique lines and two small wavy lines, of medium fabric, showing an oxidized core. From an early level of Period I.

26. Fragment of a middle portion of a jar of red ware, painted in black on a brownish slip, making a spotted animal and a rayed design (partial), of fine fabric, showing an oxidized core. From a late level of Period I.

27. Fragment of an upper portion of a jar of red ware, painted in black making horizontal bands and below, double arch with oblique lines, of fine fabric, showing an oxidized core. From a late level of Period I.

28. Fragment of a middle portion of a jar of red ware, painted in black and white with bands and five vertical tapering lines inside a double arch, of medium fabric, showing an oxidized core. From an early level of Period I.

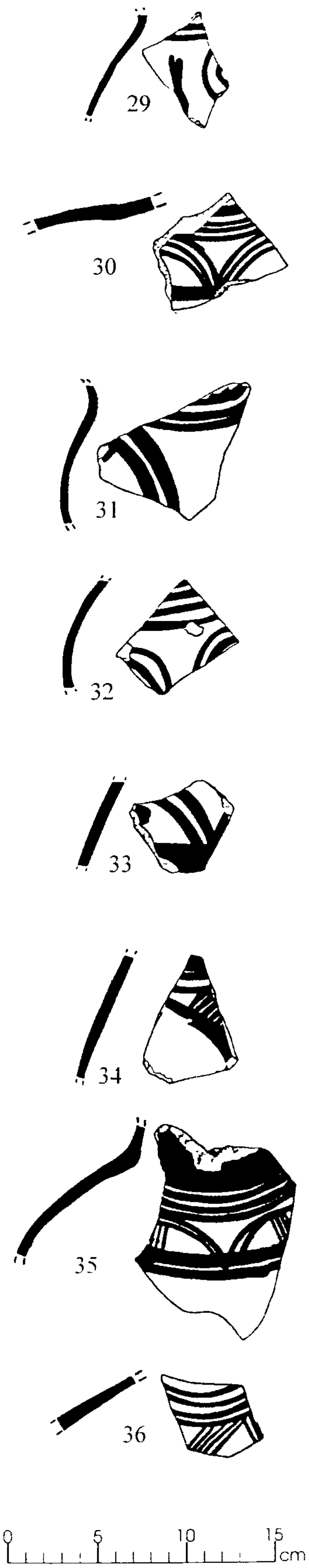


Fig. 44

29. Fragment of an upper portion of a jar of red ware, painted in black and white bands and double semi-circles and an oblique line with branching off, of fine fabric, showing an oxidized core. From an early level of Period I.

30. Fragment of a middle portion of a jar of red ware, painted in black horizontal thick and thin bands and continuous triple arches and thick horizontal band below, of medium fabric, showing an oxidized core. From a late level of Period I.

31. Fragment of a middle portion of a jar of red ware, painted in black, with oblique strokes and double arches within horizontal bands, of fine fabric, showing an oxidized core. From a late level of Period I.

32. Fragment of a middle portion of a jar of red ware, painted in black on red slip making horizontal bands and groups of double circle, of medium fabric, showing an oxidized core. From a late level of Period I.

33. Fragment of a middle portion of a jar of red ware, painted in black on red slip making groups of double arches with a dot springing from a horizontal band, of medium fabric, showing an oxidized core. From a late level of Period I.

34. Fragment of a middle portion of a jar of red ware, painted in black making horizontal bands and arch in-between, triangular space filled with oblique lines, of medium fabric, showing an oxidized core. From a mid-level of Period I.

35. Fragment of an upper portion of a jar of red ware, painted in black making thick and thin horizontal bands and groups of running arches with oblique strokes in the centre springing from thick horizontal bands, of medium fabric, showing an oxidized core. From an early level of Period I.

36. Fragment of a middle portion of a jar of red ware, painted in black on red slip making four horizontal bands and converging oblique lines, of fine fabric, showing an oxidized core. From an early level of Period I.

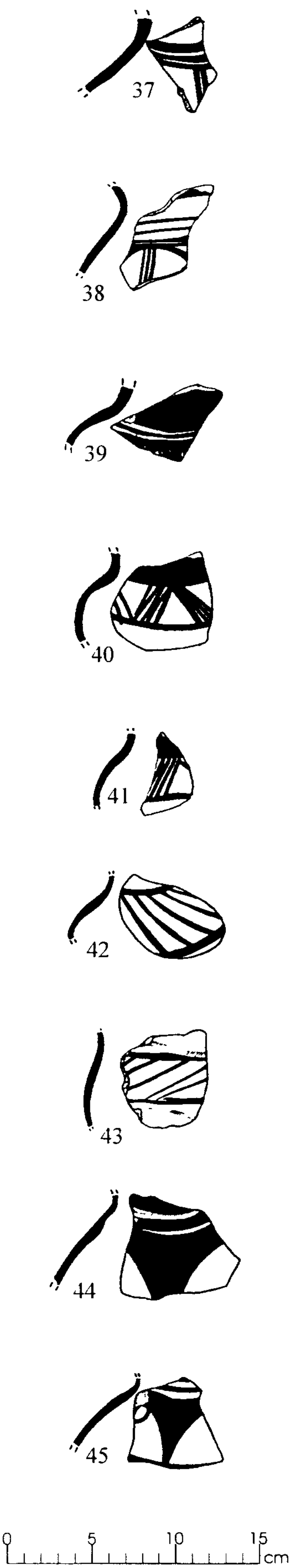


Fig. 44

37. Fragment of an upper portion of a jar of red ware, painted in black on red slip making three horizontal bands and two vertical lines, of medium fabric, showing an oxidized core. From a late level of Period I.

38. Fragment of an upper portion of a jar of red ware, painted in black making thin horizontal bands and an arch having three oblique lines inside, of medium fabric, showing an oxidized core. From a late level of Period I.

39. Fragment of an upper portion of a jar of red ware, painted in black making thick and thin bands, contiguous converging triangles, of medium fabric, showing an oxidized core. From a late level of Period I.

40. Fragment of a miniature pot of red ware, painted in black on red slip, making thick and thin bands and panel of converging triangles, of medium fabric, showing an oxidized core. From a mid-level of Period I.

41. Fragment of a miniature pot of red ware, painted in black with thick bands and converging lines, of fine fabric, showing an oxidized core. From a mid-level of Period I.

42. Fragment of a miniature pot of red ware, painted in black on red slip making oblique lines within the bands, of fine fabric, showing an oxidized core. From a late level of Period I.

43. Fragment of an upper portion of a miniature pot of red ware, painted in black and white with horizontal bands and oblique lines within the bands, of medium fabric, showing an oxidized core. From a mid-level of Period I.

44. Fragment of an upper portion of a jar of red ware, painted in black and white making horizontal bands and filled in triangles between the two arches, of medium fabric, showing an oxidized core. From an early level of Period I.

45. Fragment of an upper portion of a jar of red ware, painted in black on red slip making horizontal bands and filled in triangle in-between the arch, of medium fabric, showing an oxidized core. From an early level of Period I.

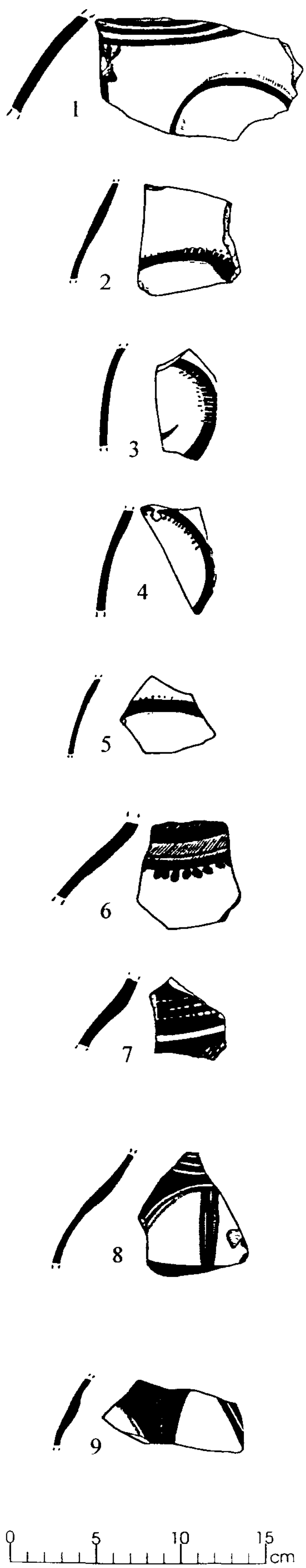


Fig. 45

FIG. 45

1. Fragment of a middle portion of a jar of red ware, painted in black and white on red slip, making horizontal bands and a twig and bushy ended frond, of medium fabric, showing an oxidized core. From a late level of Period I.

2. Fragment of a middle portion of a jar of red ware, painted in black and white making a frond with white dots on the top, of fine fabric, showing an oxidized core. From a mid-level of Period I.

3. Fragment of a middle portion of a jar of red ware, painted in black on red slip making a loop-like design with white strokes over it, of fine fabric, showing an oxidized core. From a late level of Period I.

4. Fragment of a middle portion of a jar of red ware, painted in black and white making a loop-like design with white dots, of fine fabric, showing an oxidized core. From an early level of Period I.

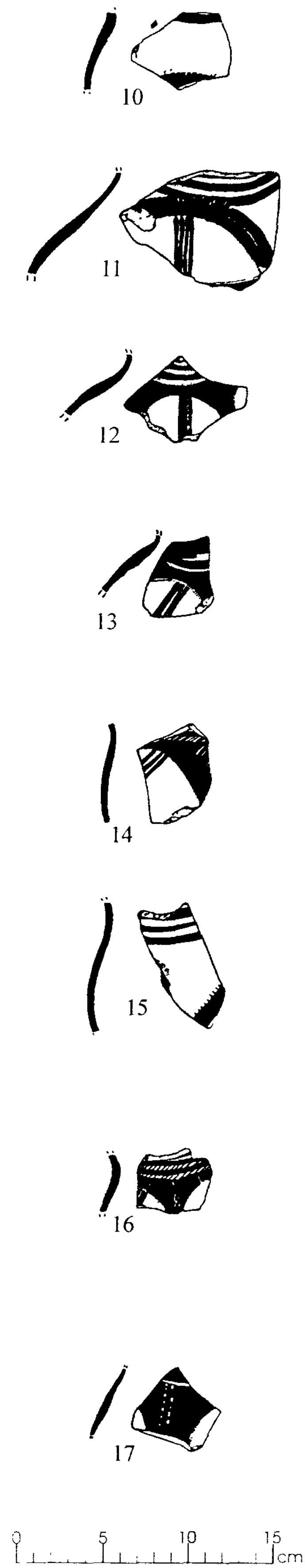
5. Fragment of a middle portion of a jar of red ware, painted in black and white making a frond with white dots, of fine fabric, showing an oxidized core. From a late level of Period I.

6. Fragment of a middle portion of a jar of red ware, painted in black and white making alternate horizontal bands and running dots below the last band. From an early level of Period I.

7. Fragment of a middle portion of a jar of red ware, painted in black making horizontal bands cut by vertical lines making a chequer design and below criss-cross design in an arch, of fine fabric, showing an oxidized core. From an early level of Period I.

8. Fragment of a middle portion of a jar of red ware, painted in black and white on red slip, making horizontal bands, arch and in-between filled-in trianglular space and inside black and white vertical lines, of fine fabric, showing an oxidized core. From an early level of Period I.

9. Fragment of a middle portion of a jar of red ware, painted in black and white making arches with oblique lines and triangular space filled with black and white dots arranged vertically, of fine fabric, showing an oxidized core. From a mid-level of Period I.



10. Fragment of a middle portion of a jar of red ware, painted in black and white making horizontal band and line, dotted with white strokes, of fine fabric, showing an oxidized core. From an early level of Period I.

11. Fragment of a middle portion of a jar of red ware, painted in black and white making an arch with four vertical lines inside, of fine fabric, showing an oxidized core. From an early level of Period I.

12. Fragment of an upper portion of a jar of red ware, painted in black and white showing arches with vertical black and white lines and triangular surface filled with black, of fine fabric, showing an oxidized core. From an early level of Period I.

13. Fragment of an upper portion of a jar of red ware, painted in black and white on red slip, making horizontal bands and an arch-like design having four oblique lines inside, of fine fabric, showing an oxidized core. From a mid-level of Period I.

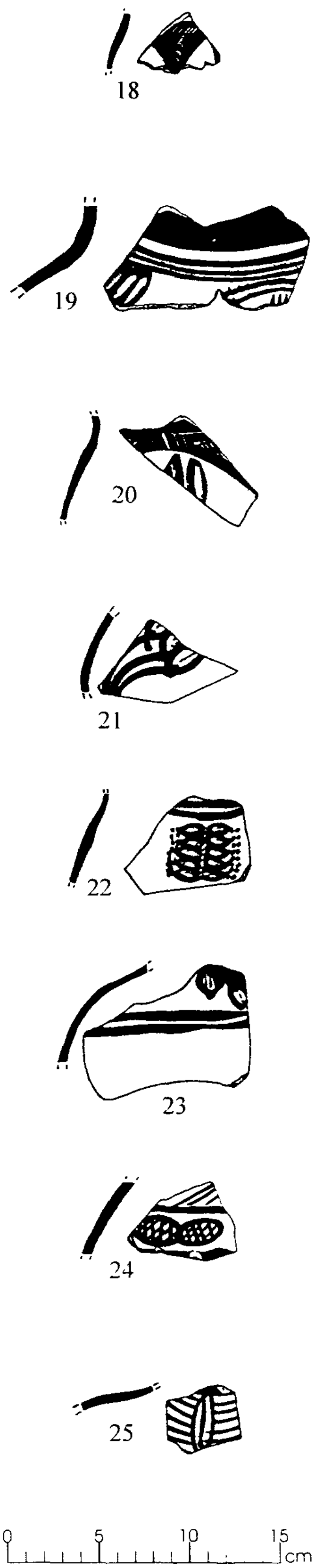
14. Fragment of an upper portion of a jar of red ware, painted in black and white with horizontal alternate bands, an arch-like design and oblique lines inside filled with black in the triangular space having some white strokes, of fine fabric, showing an oxidized core. From a mid-level of Period I.

15. Fragment of an upper portion of a jar of red ware, painted in black and white making horizontal bands and oblique black band with white strokes, of fine fabric, showing an oxidized core. From a mid-level of Period I.

16. Fragment of an upper portion of a jar of red ware, painted in black and white making alternate horizontal bands and symmetrically joined arches with intervening triangular space filled with oblique white strokes and in the centre a chain-like design, of fine fabric, showing an oxidized core. From a late level of Period I.

17. Fragment of a middle portion of a jar of red ware, painted in black and white making arches with filled triangular black spaces with vertical lines of white dots, of fine fabric, showing an oxidized core. From a mid-level of Period I.

Fig. 45



18. Fragment of a middle portion of a jar of red ware, painted in black and white making arches with filled-in black triangular surface in-between having a white line, in the centre, of fine fabric, showing an oxidized core. From an early level of Period I.

19. Fragment of an upper portion of a jar of red ware, painted in black and white making black and white group of lenticulars and arch having three oblique lines inside below thick and thin group of bands, of fine fabric, showing an oxidized core. From an early level of Period I.

20. Fragment of an upper portion of a jar of red ware, painted in black and white making an arch with two lenticulars inside and in the triangular space white oblique lines etc., of fine fabric, showing an oxidized core. From a late level of Period I.

21. Fragment of a middle portion of a jar of red ware, painted in black and white making leaf-like design on branches, of fine fabric, showing an oxidized core. From a late level of Period I.

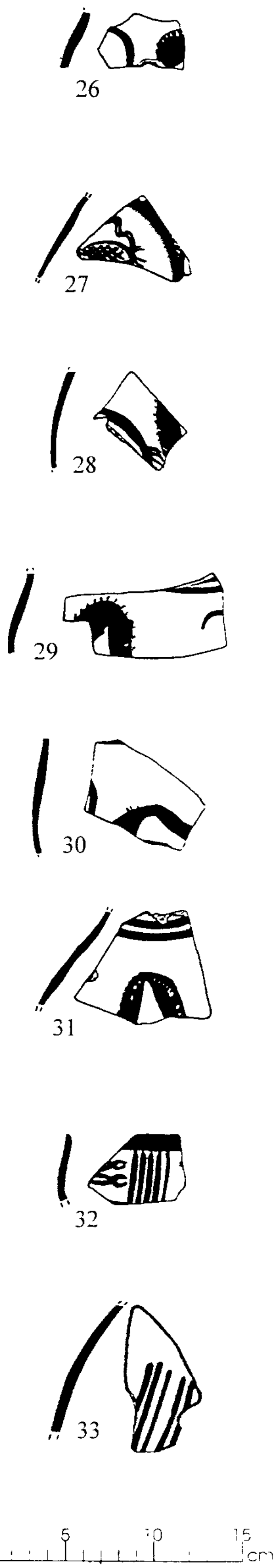
22. Fragment of a middle portion of a jar of red ware, painted in black and white, making horizontal bands and below a row of leaves branching out on both sides of a single stem, with ornamental small white dots on both sides, of fine fabric, showing an oxidized core. From a mid-level of Period I.

23. Fragment of a middle portion of a jar of red ware, painted in black and white making a leaf-like design and horizontal bands, of fine fabric, showing an oxidized core. From a late level of Period I.

24. Fragment of a middle portion of a jar of red ware, painted in black making oblique lines between horizontal bands, leaves filled-in with criss-cross design, of coarse fabric, showing an oxidized core. From an early level of Period I.

25. Fragment of a middle portion of a jar of red ware, painted in black and white making horizontal bands and in-between cut by a leaf-like design in black and white, of fine fabric, showing an oxidized core. From a late level of Period I.

Fig. 45



26. Fragment of a middle portion of a jar of red ware, painted in black and white making a semi-circle and thick circle filled with white dots, of fine fabric, showing an oxidized core. From an early level of Period I.

27. Fragment of a middle portion of a jar of red ware, painted in black and white making semi-circle, a snake-like design and an insect with filled in criss-cross body and legs, of fine fabric, showing an oxidized core. From an early level of Period I.

28. Fragment of a middle portion of a jar of red ware, painted in black and white on red slip, making semi-circles and a portion of frond with bushy end, of fine fabric, showing an oxidized core. From an early level of Period I.

29. Fragment of a middle portion of a jar of red ware, painted in black making horizontal bands and plant-like designs with vertical dots (cactus), of fine fabric, showing an oxidized core. From a late level of Period I.

30. Fragment of a middle portion of a jar of red ware, painted in black and white making semi-circle with white dots, of fine fabric, showing an oxidized core. From a late level of Period I.

31. Fragment of a middle portion of a jar of red ware, painted in black and white making horizontal bands and a roughly arch-like design having white dots on black, of fine fabric, showing an oxidized core. From a late level of Period I.

32. Fragment of a middle portion of a jar of red ware, painted in black and white on red slip making horizontal and vertical lines and a pair of horizontally placed tong-like design, of fine fabric, showing an oxidized core. From a late level of Period I.

33. Fragment of a middle portion of a jar of red ware, painted in black and white on red slip making oblique lines, of fine fabric, showing an oxidized core. From an early level of Period I.

Fig. 45

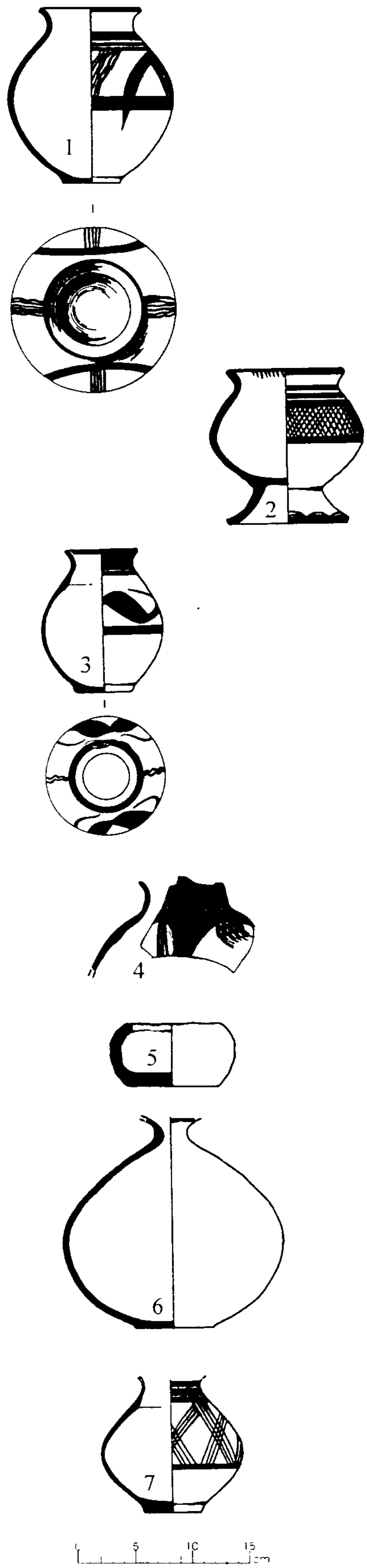


FIG. 46

1. Pot of red ware with slightly out-turned concave painted neck and spherical body, painted in black showing three oblique group of wavy lines within two thick and thin lines and a partial arch with three oblique lines, of medium fabric, showing an oxidized core. From middle level of Period I.

2. Bowl-on-stand of red ware, with a slightly out-turned rim and globular body having flaring base, painted in black making criss-cross design within three horizontal lines above and one line below on the body and with a horizontal line with running double arches on the base and a small row of oblique strokes on inner side of the rim, of medium fabric, showing an oxidized core. From an early level of Period I.

3. Pot of red ware with a slightly out-turned painted rim, spherical body and ring base, painted in black showing horizontal bands and a moustache-like design on the shoulder, of fine fabric, showing an oxidized core. From a late level of Period I.

4. Fragmentary vase of red ware with broken rim, painted in black and-white showing continuous arches filled with group of fish and vertical lines, of medium fabric, showing an oxidized core. From a mid-level of Period I.

5. Hand-made bowl of red ware with a slightly incurved rim and flat base, of coarse fabric, showing an incompletely oxidized core. From an early level of Period I.

6. Vase of red ware with a narrow-mouthed broken rim and globular body and flat base, of coarse fabric, showing an oxidized core. From a mid-level of Period I.

7. Vase of red ware with a narrow-mouthed slightly out-curved broken rim and ring base painted in black and white colour showing horizontal bands and multiple diamonds within bands, of coarse fabric, showing an oxidized core. From an early level of Period I.

Fig. 46



Pl. XXVIII : *painted pottery Fabric A.* *See p. 187*

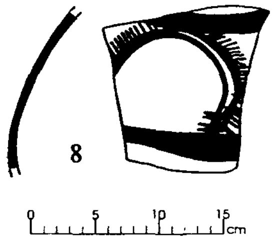


Fig. 46

8. Fragmentary pot of red ware, having globular body, painted in black showing frond-like design with rays within thick bands, of fine fabric, showing an oxidized core. From an early level of Period I.

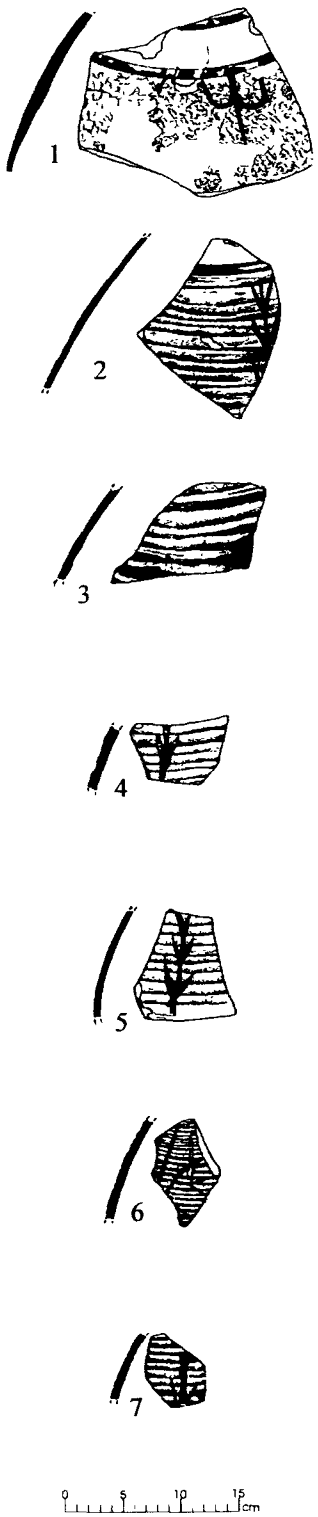


Fig. 47

FIG. 47
Fabric "B"

1. Fragment of a middle portion of a big jar of red ware, lower portion having rusticated surface, painted in black showing horizontal bands and a *trisúla*-like motif, of medium fabric, showing an oxidized core. From an early level of Period I.
2. Fragment of a middle portion of a jar of red ware, having rusticated surface with grooves on the lower part, painted in black showing bands and a plant, of medium fabric, having an oxidized core. From a late level of Period I.
3. Fragment of a middle portion of a jar of red ware, having rusticated surface with triangular grooves on the lower part, painted in black and white making a criss-cross pattern and a plant-like design on the side, of medium fabric, showing an oxidized core. From a late level of Period I.
4. Fragment of a middle portion of a jar of red ware, having rusticated surface, with grooves painted in black showing a plant-like design, of medium fabric, showing an oxidized core. From an early level of Period I.
5. Fragment of a middle portion of a jar of red ware having rusticated surface with grooves painted in black making a plant design, of medium fabric, showing an oxidized core. From an early level of Period I.
6. Fragment of a middle portion of a jar of red ware, having rusticated surface with grooms, painted in black making grass-like leaves, of medium fabric, showing an oxidized core. From a mid-level of Period I.
7. Fragment of a middle portion of a jar of red ware having rusticated surface with grooves painted in black showing a plant-like design, of medium fabric, showing an oxidized core. From an early level of Period I.

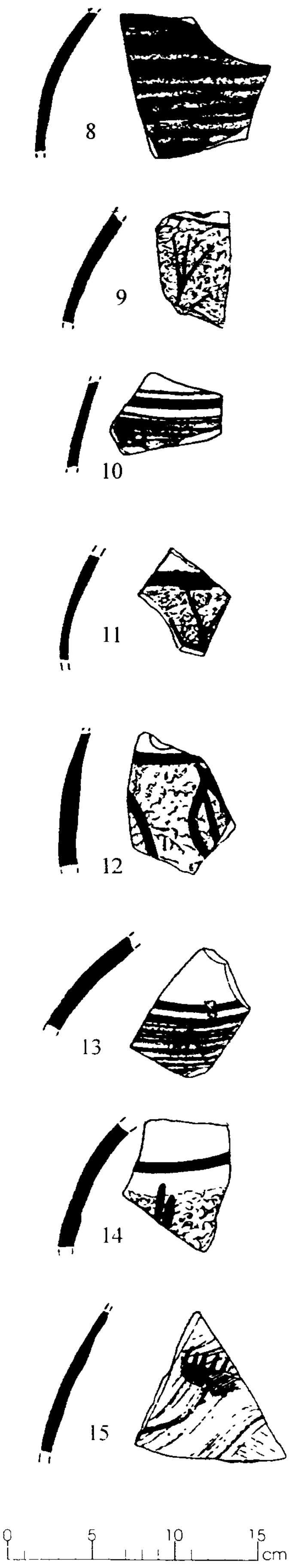


Fig. 47

8. Fragment of a middle portion of a jar of red ware having rusticated surface with grooves, painted in black, showing a horizontal band and some plant-like design, of medium fabric, showing an oxidized core. From a mid-level of Period I.

9. Fragment of a middle portion of a jar of red ware having rusticated surface, painted in black making a band and some plant-like design, of medium fabric, showing an oxidized core. From a late level of Period I.

10. Fragment of a middle portion of a jar of red ware having rusticated surface with grooves and horizontal bands and a plant-like design in white and black below it, of fine fabric, showing an oxidized core. From a late level of Period I.

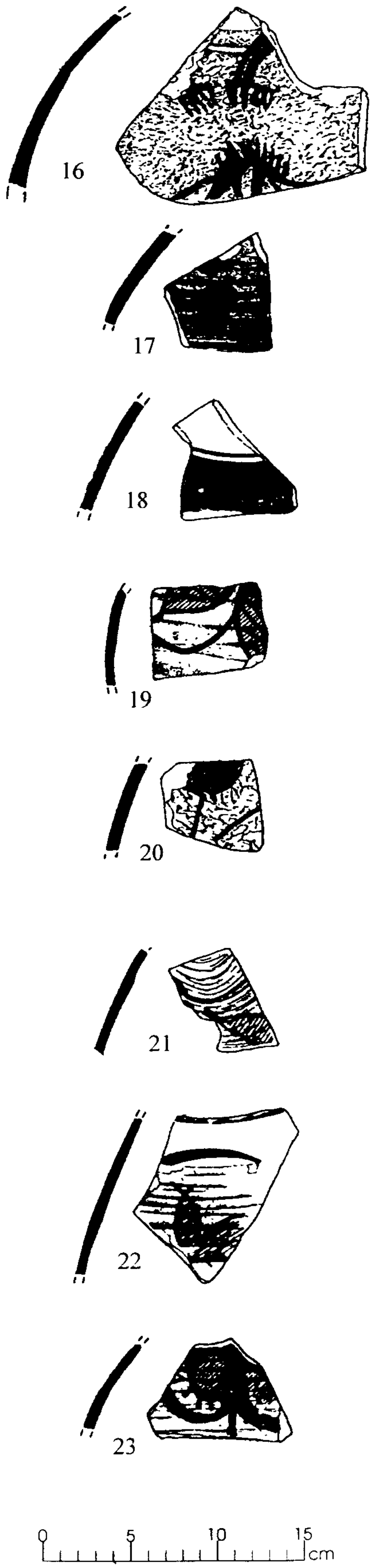
11. Fragment of a middle portion of a jar of red ware having rusticated surface, painted in black making a band and a plant-like design, of medium fabric, showing an oxidized core. From an early level of Period I.

12. Fragment of a middle portion of a jar of red ware having rusticated surface treated with white, painted in black making a black band and big bud-like design and another broken line, of medium fabric, showing an oxidized core. From an early level of Period I.

13. Fragment of a middle portion of a jar of red ware, having rusticated surface with grooves in the lower part, painted in black showing horizontal bands and a bud-like design, of medium fabric, showing an oxidized core. From a late level of Period I.

14. Fragment of a middle portion of a jar of red ware having rusticated surface on the lower part, painted in black over red slip, making horizontal bands and two oblique lines, of fine fabric, showing an oxidized core. From a late level of Period I.

15. Fragment of a middle portion of a jar of red ware having rusticated surface with irregular grooves, painted in black and white lotus-like flower, of fine fabric, showing an oxidized core. From a middle level of Period I.



16. Fragment of a middle portion of a jar of red ware having rusticated surface, painted in black, showing some cactus-like plants with fronds, of medium fabric, showing an oxidized core. From a mid-level of Period I.

17. Fragment of a middle portion of a jar of red ware having rusticated surface with grooves painted in black and white making a flower-like design, of medium fabric, showing an oxidized core. From an early level of Period I.

18. Fragment of a middle portion of a jar of red ware having rusticated surface with painted in black making bands and a leaf-like design, of fine fabric, showing an oxidized core. From an early level of Period I.

19. Fragment of a middle portion of a jar of red ware having rusticated surface with grooves painted in black and white showing leaf-like design with branches, of medium fabric, showing an oxidized core. From a mid-level of Period I.

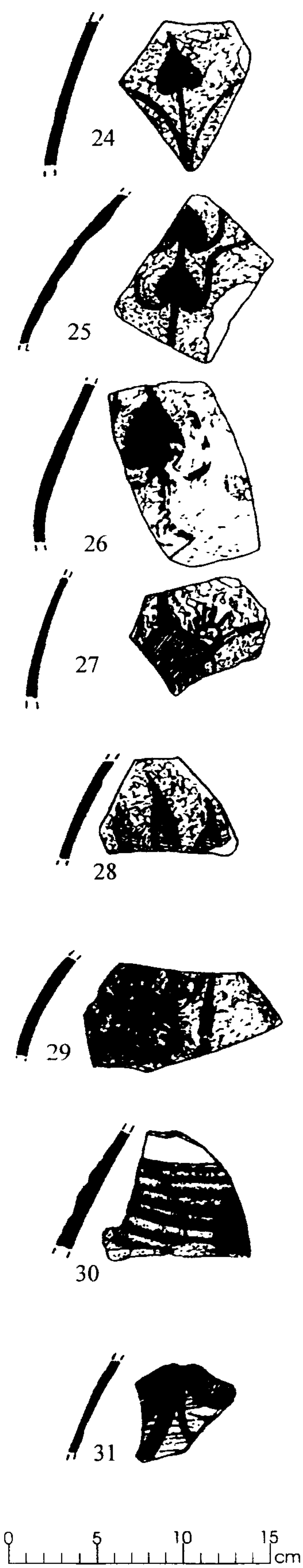
20. Fragment of a middle portion of a jar of red ware having rusticated surface, painted in black and white making branches, leaf or band design, of medium fabric, showing an oxidized core. From an early level of Period I.

21. Fragment of a middle portion of a jar of red ware having rusticated surface with grooves, painted in black and white showing fish-like design, of medium fabric, showing an oxidized core. From an early level of Period I.

22. Fragment of a middle portion of a jar of red ware having rusticated surface with grooves on the lower part, painted in black showing a band and below two fish-like design, of medium fabric, showing an oxidized core. From a mid-level of Period I.

23. Fragment of a middle portion of a jar of red ware having rusticated surface with grooves, painted in black and white showing plant-like design, of medium fabric, showing an oxidized core. From a mid-level of Period I.

Fig. 47



24. Fragment of a middle portion of a jar of red ware having rusticated surface, painted in black, making a typical *pipal* leaf with branches, of medium fabric, showing an oxidized core. From a late level of Period I.

25. Fragment of a middle portion of a jar of red ware having rusticated surface, painted in black showing two successive *pipal* leaves with branches making a *trisúla*-like design, of medium fabric, showing an oxidized core. From a mid-level of Period I.

26. Fragment of a middle portion of a jar of red ware having rusticated surface, painted in black showing a *pipal* leaf with two branches making a trident-like design, of medium fabric, showing an oxidized core. From a late level of Period I.

27. Fragment of a middle portion of a jar of red ware having rusticated surface, painted in black and white showing a rising sun from a hill, of medium fabric, showing an oxidized core. From a late level of Period I.

28. Fragment of a middle portion of a jar of red ware having rusticated surface, painted in black and white, making three leaves, of medium fabric, showing an oxidized core. From a mid-level of Period I.

29. Fragment of a middle portion of a jar of red ware having rusticated surface, painted in black and white making a maltese cross within a circle and a few vertical lines and foliage, of medium fabric, showing an oxidized core. From a late level of Period I.

30. Fragment of a middle portion of a jar of red ware having rusticated surface with grooves, painted in black and white showing a branch and a leaf-like design, of fine fabric, showing an oxidized core. From a late level of Period I.

31. Fragment of a middle portion of a jar of red ware having rusticated surface with grooves, painted in black and white making a plant-like design, of fine fabric, showing an oxidized core. From an early level of Period I.

Fig. 47

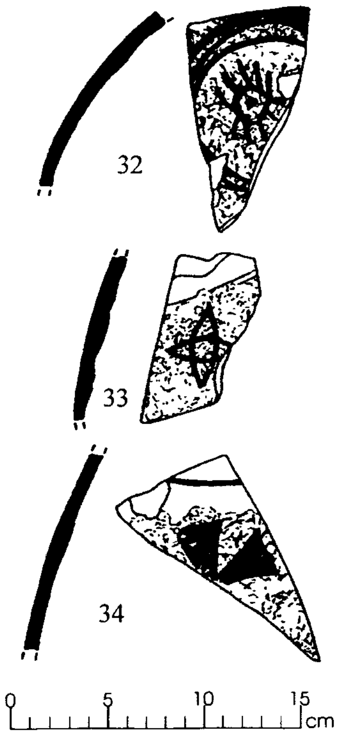


Fig. 47

32. Fragment of a middle portion of a jar of red ware having rusticated surface, painted in black making a sun design within triple circles, of medium fabric, showing an oxidized core. From an early level of Period I.

33. Fragment of a middle portion of a jar of red ware having rusticated surface, painted in black showing two lenticulars crossing each other, of medium fabric, showing an oxidized core. From a mid-level of Period I.

34. Fragment of a middle portion of a jar of red ware having rusticated surface, painted in black showing maltese cross below a band, of medium fabric, showing an oxidized core. From a mid-level of Period I.

FIG. 48

1. Fragment of an upper portion of a jar of red ware with brown slip having grooves on the lower portion, painted with black bands, of medium fabric, showing an oxidized core. From a late level of Period I.
2. Fragment of a middle portion of a jar of red ware with a brown slip, rusticated surface on the lower portion, painted with black thin and thick bands, of medium fabric, showing an oxidized core. From a late level of Period I.
3. Fragment of an upper portion of a jar of red ware with brown slip, rusticated surface on the lower portion, painted with black bands, of medium fabric, showing an oxidized core. From an early level of Period I.
4. Fragment of a middle portion of a jar of red ware having rusticated surface with back band, of medium fabric, showing an oxidized core. From a mid-level of Period I.
5. Fragment of a middle portion of a jar of red ware having rusticated surface, painted with a black band, of fine fabric, showing an oxidized core. From a late level of Period I.

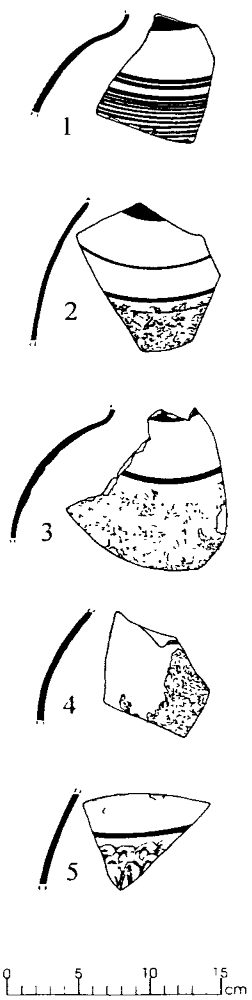
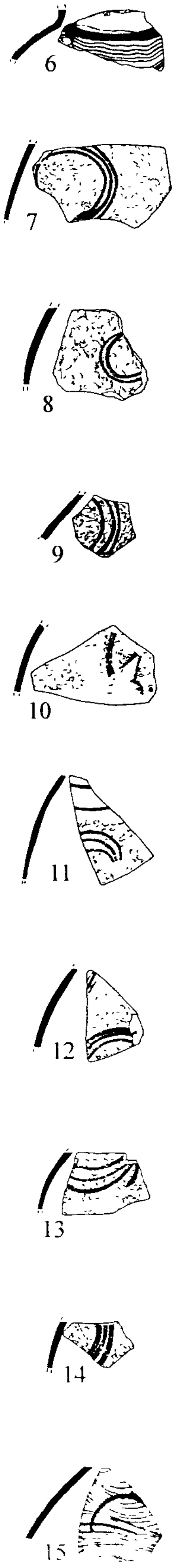


Fig. 48



6. Fragment of an upper portion of a jar of red ware having wavy grooves painted in black making a horizontal band, of medium fabric, showing an oxidized core. From a late level of Period I.

7. Fragment of a middle portion of a jar of red ware having rusticated surface, painted in black with triple circle, of medium fabric, showing an oxidized core. From a late level of Period I.

8. Fragment of a middle portion of a jar of red ware having rusticated surface, painted in black and white having double circles, of medium fabric, showing an oxidized core. From a late level of Period I.

9. Fragment of an upper portion of a jar of red ware having rusticated surface, painted in black making triple circles, of medium fabric, showing an oxidized core. From a late level of Period I.

10. Fragment of a middle portion of a jar of red ware having rusticated surface, painted with an obscure design, of medium fabric, showing an oxidized core. From an early level of Period I.

11. Fragment of a middle portion of a jar of red ware having rusticated surface, painted with double horizontal black band and triple semi-circles, of medium fabric, showing an oxidized core. From an early level of Period I.

12. Fragment of a middle portion of a jar of red ware having rusticated surface, painted with horizontal black bands and triple circles, of medium fabric, showing an oxidized core. From a late level of Period I.

13. Fragment of a middle portion of a jar of red ware having rusticated surface, painted in black showing triple semi-circles, of medium fabric, showing an oxidized core. From an early level of Period I.

14. Fragment of a middle portion of a jar of red ware having rusticated surface, painted in black making triple circles, of medium fabric, showing an oxidized core. From a late level of Period I.

15. Fragment of a middle portion of a jar of red ware having rusticated surface, painted in black making a semi-circle, of medium fabric, showing an oxidized core. From a mid-level of Period I

Fig. 48

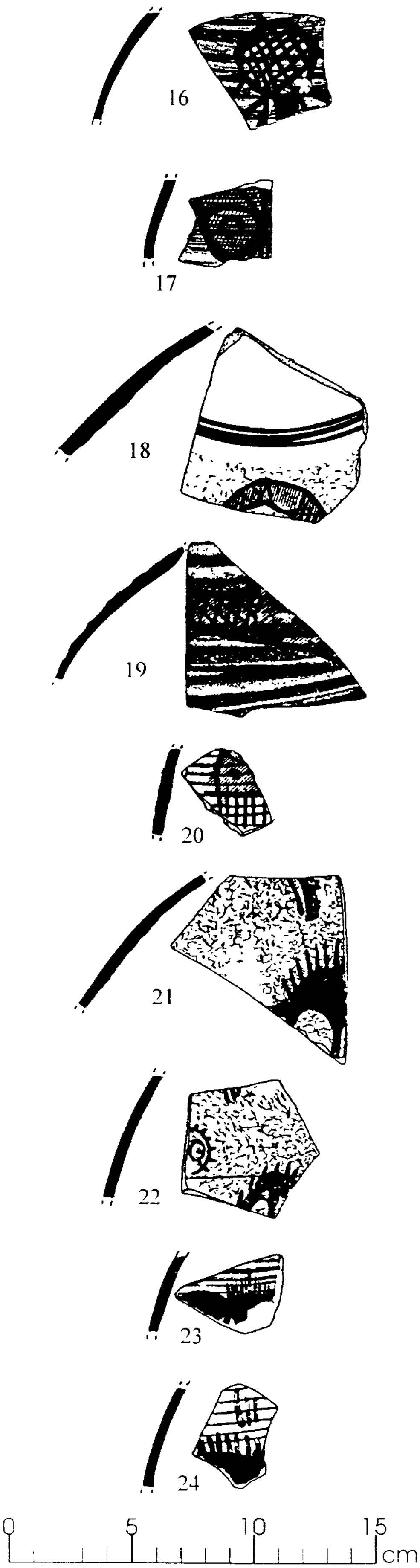


Fig 48

16. Fragment of a middle portion of a jar of red ware having irregular grooves on the surface, painted in black with semi-circles filled with criss-cross design, of medium fabric, showing an oxidized core. From a late level of Period I.

17. Fragment of a middle portion of a jar of red ware having rusticated surface, painted in black showing a criss-cross design in a circle, of medium fabric, showing an oxidized core. From a mid-level of Period I.

18. Fragment of a middle portion of a jar of red ware having rusticated surface, painted in black and white showing double circles filled in with criss-cross design under triple horizontal bands, of medium fabric, showing an oxidized core. From a late level of Period I.

19. Fragment of a middle portion of a jar of red ware, painted in black with bands on rusticated grooved surface, painted with criss-cross design with horizontal bands. From an early level of Period I.

20. Fragment of a middle portion of a jar of red ware having a rusticated surface with grooves, painted in black and white, making black dot over a white surface and chequre design below. From a mid-level of Period I.

21. Fragment of a middle portion of a jar of red ware having rusticated surface painted in black making a cactus-like design and strokes above, of medium fabric, showing an oxidized core. From a late level of Period I.

22. Fragment of a middle portion of a jar of red ware having rusticated surface, painted in black showing sun-like designs along with a cactus, of medium fabric, showing an oxidized core. From a late level of Period I.

23. Fragment of a middle portion of a jar of red ware having grooved surface, painted in black making thorny branch of a plant design, of medium fabric, showing an oxidized core. From an early level of Period I.

24. Fragment of a middle portion of a jar of red ware having rusticated surface with grooves, painted in black making thorn designs, of medium fabric, showing an oxidized core. From an early level of Period I.

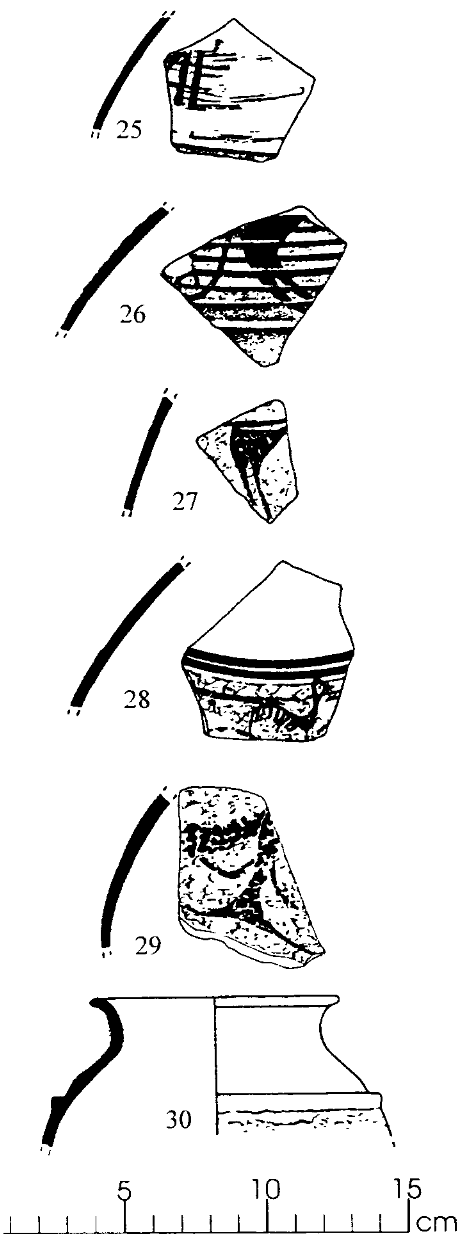


Fig. 48

25. Fragment of a middle portion of a jar of red ware having rusticated surface with grooves, painted in black making two vertical lines. From a late level of Period I.

26. Fragment of a middle portion of a jar of red ware having rusticated and grooved surface, painted in black showing animal-like design with a curly tail, of fine fabric, showing an oxidized core. From a late level of Period I.

27. Fragment of a middle portion of a jar of red ware having rusticated surface, painted in black and white making animal of which now only the hind part remains, of medium fabric, showing an oxidized core. From a late level of Period I.

28. Fragment of a middle portion of a jar of red ware having black band and rustication on the lower portion, painted in black making a bird-like design, of medium fabric, showing an oxidized core. From a late level of Period I.

29. Fragment of a middle portion of a jar of red ware having rusticated surface, painted in black making a human figure design, of medium fabric, showing an oxidized core. From a late level of Period I.

30. Fragment of an upper portion of a jar of red ware with an out-turned featureless rim, having a ridge on the shoulder and rusticated surface below, of medium fabric, showing an oxidized core. From a late level of Period I.

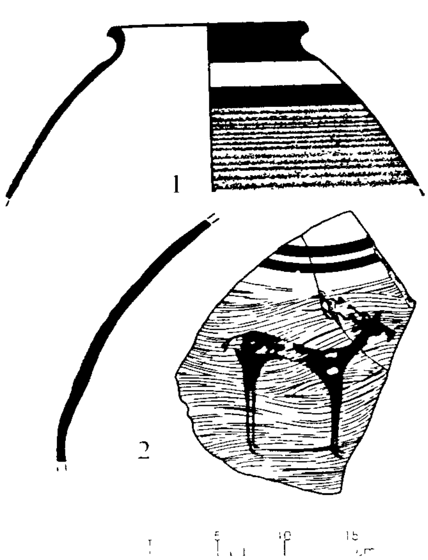


Fig. 49

FIG. 49

1. Fragment of a big jar of red ware with slightly out-turned thickened rim, oblique spherical body, painted externally in black with thick and thin horizontal lines and having roughened surface below the lines, of fine fabric, showing an oxidized core. From a late level of Period I.

2. Fragment of a big jar with broken rim and spherical body, painted externally in black with two horizontal bands and a stag standing on a roughened surface, of medium fabric, showing an oxidized core. From a late level of Period I.



Pl. XXIX : painted pottery Fabric B See pp. 189-196

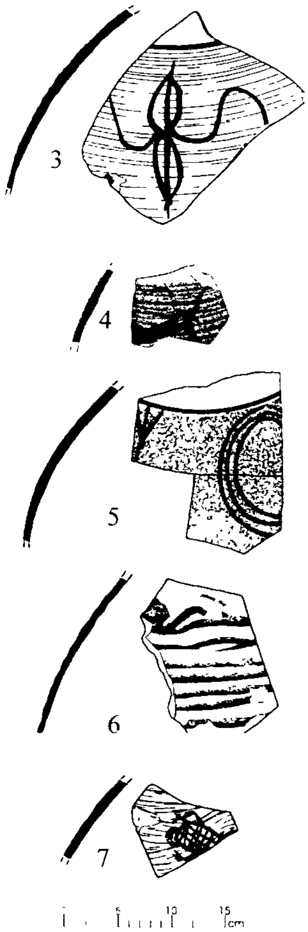


Fig. 49

3. Fragment of a jar of red ware with a slightly oblique spherical body, painted in black showing a floral design on roughened surface, of fine fabric, showing an oxidized core. From an early level of Period I.
4. Fragment of a jar of red ware with a slightly oblique spherical shoulder, painted in black showing standing stag on roughened surface, of fine fabric, showing an oxidized core. From a late level of Period I.
5. Fragment of a jar of red ware with oblique spherical body, painted in black showing a floral design and a set of three concentric circles and a twig in the left on roughened surface, of fine fabric, showing an oxidized core. From a mid-level of Period I.
6. Fragment of a jar of red ware with oblique shoulder, with mud smearing making a horizontal pattern, of medium fabric, showing an oxidized core. From a mid-level of Period I.
7. Fragment of a jar of red ware with oblique shoulder, painted in black showing an insect-like design, of medium fabric, showing an oxidized core. From a mid-level of Period I.

FIG. 50
Fabric "C"

1. Fragment of a vase of red ware with an out-turned featureless rim, short concave neck and globular body having a brownish slip, painted in black thick band on the rim and neck, of fine fabric, showing an oxidized core. From a late level of Period I.
2. Fragment of a vase of red ware with slightly out-turned collared rim and oblique sides having bright brown slip, painted on rim and neck with a thick black band, of medium fabric, showing an oxidized core. From a mid-level of Period I.
3. Fragment of a vase of red ware with dark brown slip with an out-turned thickened featureless rim and oblique sides, having grooves inside on the shoulder, the rim painted black thick band, of fine fabric, showing an oxidized core. From an early level of Period I.

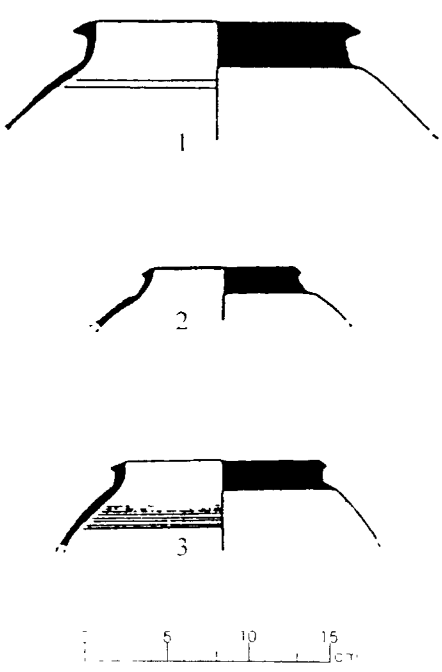


Fig. 50

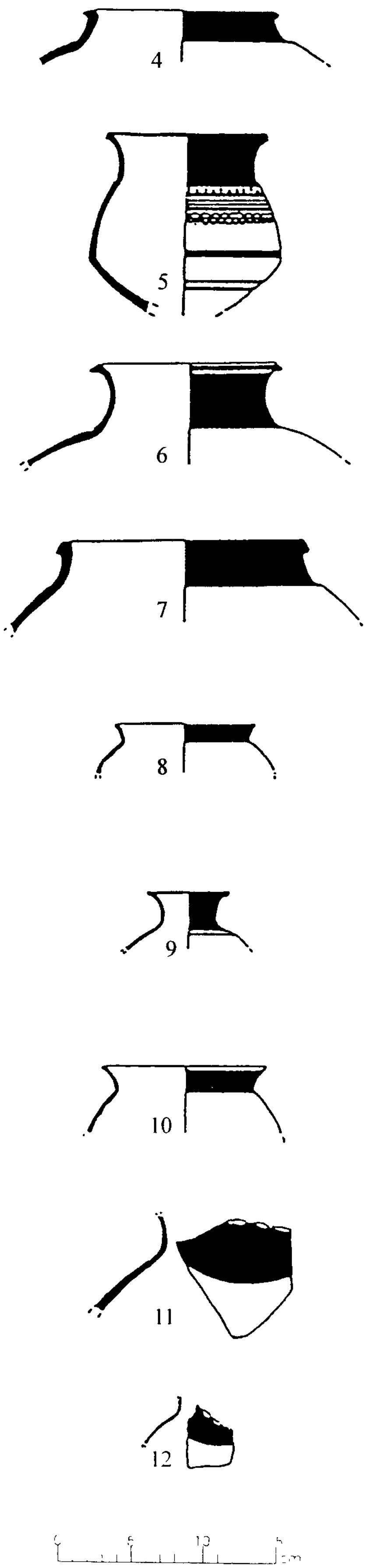


Fig. 50

4. Fragment of a vase of red ware having brown slip with a incurved undercut rim, painted with black thick band on the rim, of medium fabric, showing an oxidized core. From a late level of Period I.

5. Fragment of a vase of red ware having brownish slip with an out-turned featureless rim, concave neck, globular body and carinated base, painted with black thick and thin bands, rows of dots and wavy lines, of fine fabric, showing an oxidized core. From a mid-level of Period I.

6. Fragment of a jar of red ware having a brown slip, with an out-turned featureless rim, concave neck and globular body, painted on the rim and neck with a thick band, of fine fabric, showing an oxidized core. From a mid-level of Period I.

7. Fragment of a jar of red ware having a light brown slip with an out-turned featureless rim and globular body, painted black with a thick band on the rim and neck, of fine fabric, showing an oxidized core. From a late level of Period I.

8. Fragment of a small vase of red ware having a brown slip with a slightly out-turned featureless rim, painted in black, of fine fabric, showing an oxidized core. From a late level of Period I.

9. Fragment of a vase of red ware having a brown slip with a slightly out-turned featureless rim, painted with a very thick black band on the neck, of fine fabric, showing an oxidized core. From an early level of Period I.

10. Fragment of a vase of red ware having a brown slip, an out-turned featureless rim and globular body, painted with thick black band on the rim, of medium fabric, showing an oxidized core. From a late level of Period I.

11. Fragment of an upper portion of a jar of red ware having globular body, painted with a thick black band, of fine fabric, showing an oxidized core. From a mid-level of Period I.

12. Fragment of a small vase of red ware having a brown slip with oblique body, painted with thick black band, of fine fabric, showing an oxidized core and bright red slip. From a late level of Period I.

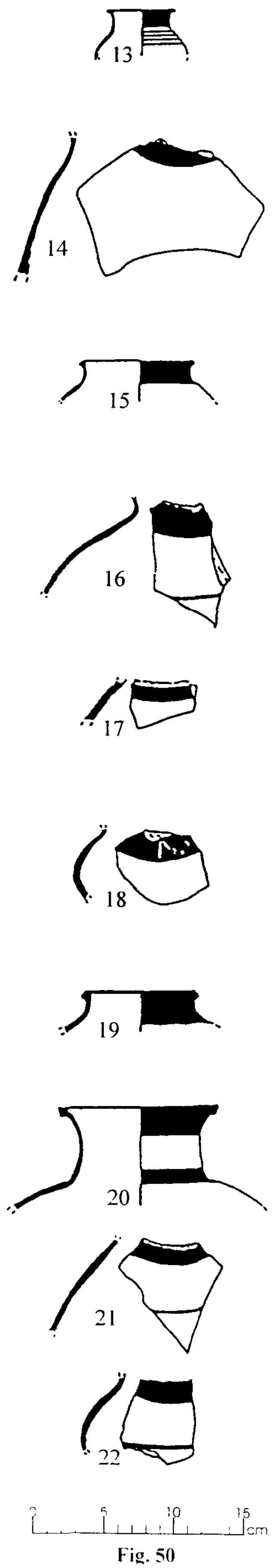


Fig. 50

13. Fragment of a small vase of red ware having abrown slip, slightly out-turned featureless rim and globular body, painted with thick and thin black bands, of fine fabric, showing an oxidized core and bright slip. From an early level of Period I.

14. Fragment of a middle portion of a jar of red ware having a bright slip, with an oblique body, painted in black having a thick band, of medium fabric, showing an oxidized core. From an early level of Period I.

15. Fragment of a vase of red ware having a brown slip, an out-turned thickened rim and globular body, painted in black making a thick band on the rim and neck, of fine fabric, showing an oxidized core and bright slip. From a late level of Period I.

16. Fragment of an upper portion of a jar of red ware having chocolate slip, an oblique body, painted in black making thick and thin bands, of fine fabric, showing an oxidized core. From a mid-level of Period I.

17. Fragment of a middle portion of a jar of red ware, bright red slip, painted with thick black band, of fine fabric, showing an oxidized core. From a mid-level of Period I.

18. Fragment of a small vase of red ware, painted in black having thick band and some carrot-like marks on the band, of medium fabric, showing an oxidized core. From a late level of Period I.

19. Fragment of a vase of red ware, with an out-turned collared rim and concave neck, painted with thick black band, of medium fabric, showing an oxidized core. From a late level of Period I.

20. Fragment of a vase of red ware with an out-turned thickened featureless rim, painted with thick black bands, of medium fabric, showing an oxidized core. From a late level of Period I.

21. Fragment of a middle portion of jar of red ware, painted with thick and thin black bands, of medium fabric, showing an oxidized core. From a late level of Period I.

22. Fragment of a small vase of red ware, with a bright red slip, painted with thick and thin black bands, of fine fabric, showing an oxidized core. From an early level of Period I.

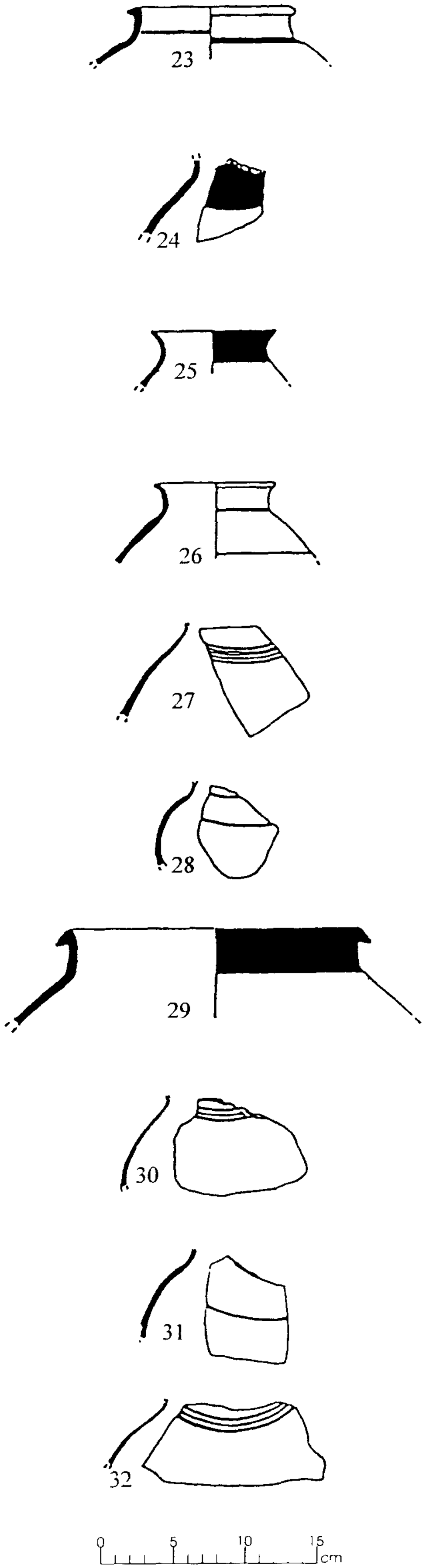


Fig. 50

23. Fragment of a vase of red ware with a beaked out-turned rim and oblique body, painted internally and externally with black bands, of medium fabric, showing an oxidized core. From a late level of Period I.

24. Fragment of a middle portion of a vase of red ware, painted with thick black band, of fine fabric, showing an oxidized core and light red slip. From an early level of Period I.

25. Fragment of a vase of red ware, with a featureless out-turned rim and concave neck, painted in black having thick band on the rim, of coarse fabric, showing an oxidized core. From an early level of Period I.

26. Fragment of a vase of red ware with an featureless out-turned rim and globular body, painted with black band, of fine fabric, showing an oxidized core. From a late level of Period I.

27. Fragment of a middle portion of jar of red ware, painted with black making five bands, of medium fabric, showing an oxidized core. From a mid-level of Period I.

28. Fragment of a middle portion of vase of red ware, painted with two black bands, of medium fabric, showing an oxidized core. From a late level of Period I.

29. Fragment of a jar of red ware with an out-turned beaked rim and globular body, painted in black having thick band on the rim and the neck, of medium fabric, showing an oxidized core. From a late level of Period I.

30. Fragment of a middle portion of a vase of red ware, painted in black making three bands, of fine fabric, showing an oxidized core. From a mid-level of Period I.

31. Fragment of a middle portion of a vase of red ware with bright red slip on the upper part, painted with a black band, of fine fabric, showing an oxidized core and bright red slip. From a late level of Period I.

32. Fragment of middle portion of a jar of red ware, painted in black having three bands, of medium fabric, showing an oxidized core. From a mid-level of Period I.

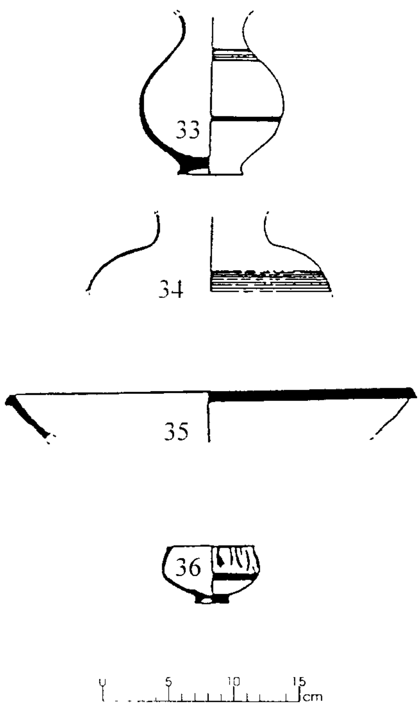


Fig. 50

33. Fragment of a vase of red ware having globular body and ring base, painted with black bands, of fine fabric, showing an oxidized core. From an early level of Period I.

34. Fragment of an upper portion of a vase of red ware having bright red slip with a globular body, having grooved lines on the shoulder part, of fine fabric, showing an oxidized core. From a mid-level of Period I.

35. Fragment of a basin of red ware with an out-turned thickened rim, painted with thick black band on the rim, of medium fabric, showing an oxidized core. From an early level of Period I.

36. Small pot of red ware with a featureless rim, globular body with a ring base, painted with black oblique strokes and a band on the body, of fine fabric, showing an oxidized core. From a late level of Period I.

FIG. 51
Fabric "D"

1. Fragment of a trough of red ware showing an out-turned flanged undercut rim, having deep base, internally decorated with deep incisions showing horizontal grooves, zigzag line above grooves and making a four petalled flower-like design within the horizontal grooves, of medium fabric, showing an oxidized core. From a late level of Period I.

2. Fragment of a trough of red ware showing an out-turned undercut rim and deep base, internally decorated with deep incisions having horizontal grooves and three petals on the grooves, of medium fabric, showing an incomplete oxidized greyish core. From a late level of Period I.

3. Fragment of a basin of red ware showing an out-turned beaked undercut rim, internally decorated with deep incisions, zigzag lines, oblique and horizontal grooves making a petal-like design, of medium fabric, showing incompletely oxidized greyish core. From a late level of Period I.

4. Fragment of a trough of red ware with a collared undercut rim and having a double ridge on the shoulder, internally decorated with incision of wavy lines, horizontal multiple grooves and leaf-like design on the grooves, of medium fabric, showing an oxidized core. From a late level of Period I.

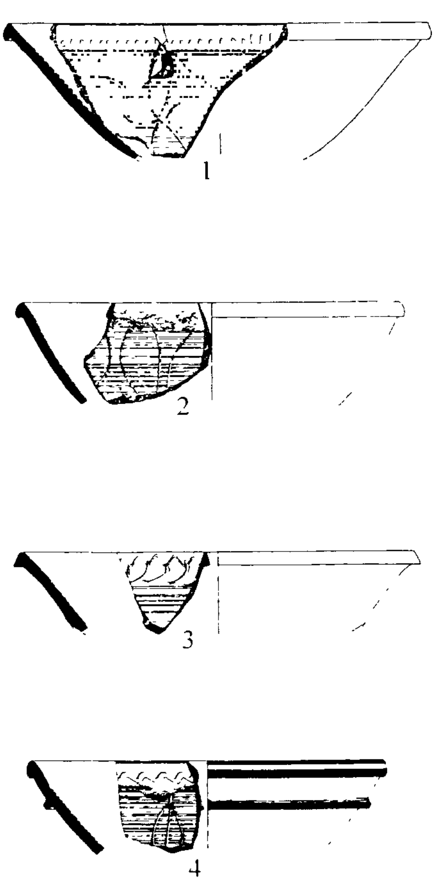
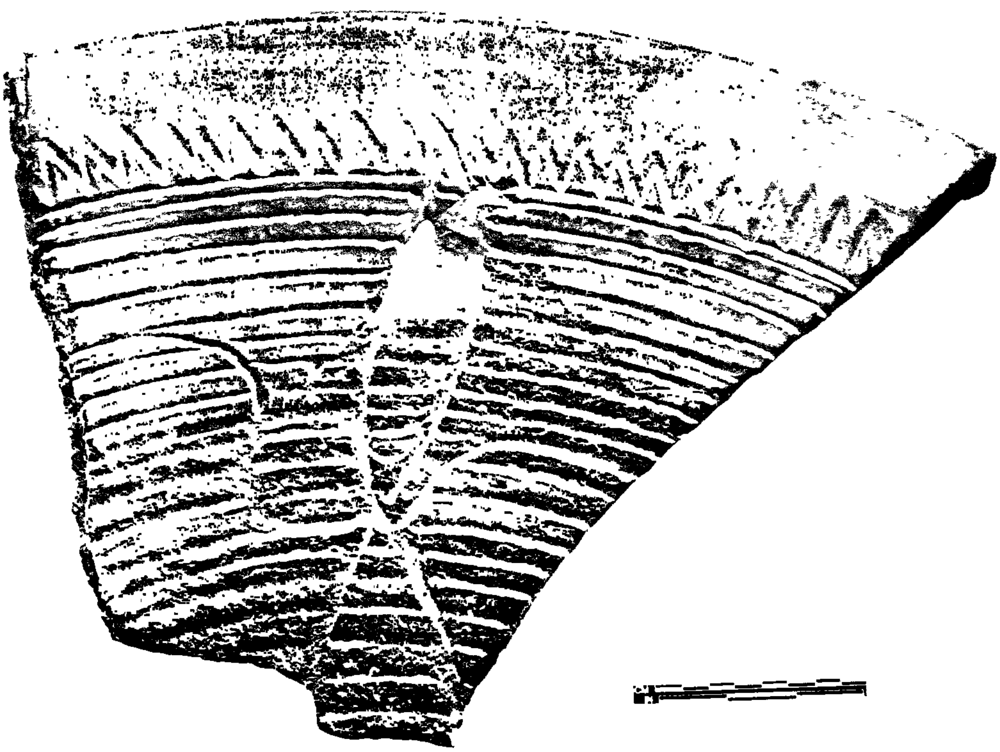


Fig. 51



Pl. XXX : *incised pottery Fabric D. See pp. 202-204*



Pl. XXXI : *incised pottery Fabric D. See p. 202*

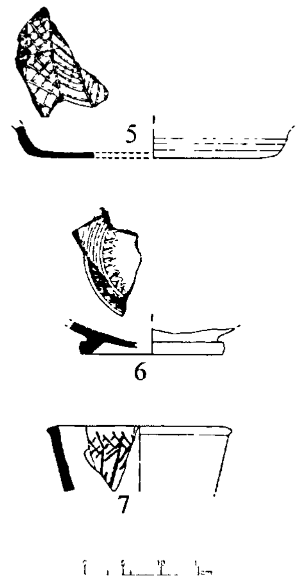


Fig. 51

5. Fragment of a basin of red ware, flat base, decorated internally with incisions, showing checker pattern and panels of oblique lines, of medium fabric, showing an oxidized core. From a mid-level of Period I.

6. Fragment of a stand of dish-on-stand, decorated internally with incisions, showing horizontal grooves and wavy lines, of medium fabric, showing an oxidized core. From a mid-level of Period I.

7. Fragment of a trough of red ware with a slightly out-turned rim and straight sides, decorated internally with incisions, criss-cross and oblique grooves, of medium fabric, showing an oxidized core. From a late level of Period I.

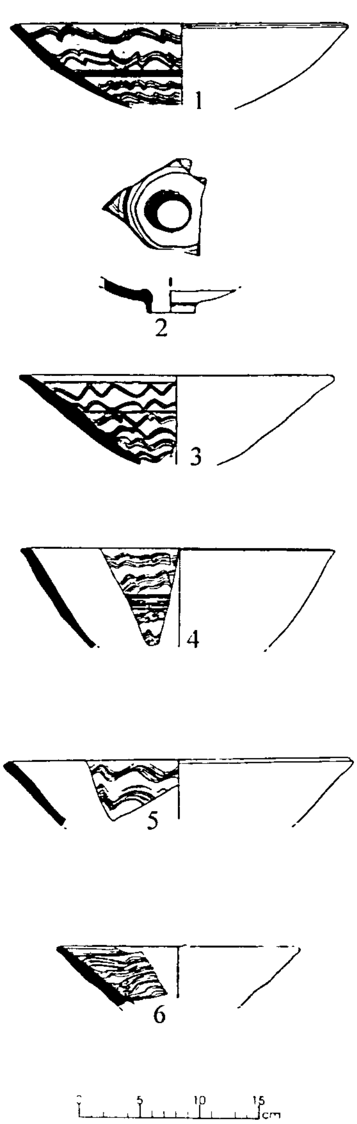


Fig. 52

FIG. 52

1. Fragment of a dish of red ware with a featureless thickened rim, internally incised with five zig zag wavy lines in two groups divided by a set of four parallel horizontal lines, of medium fabric, showing an oxidized core. From a late level of Period I.

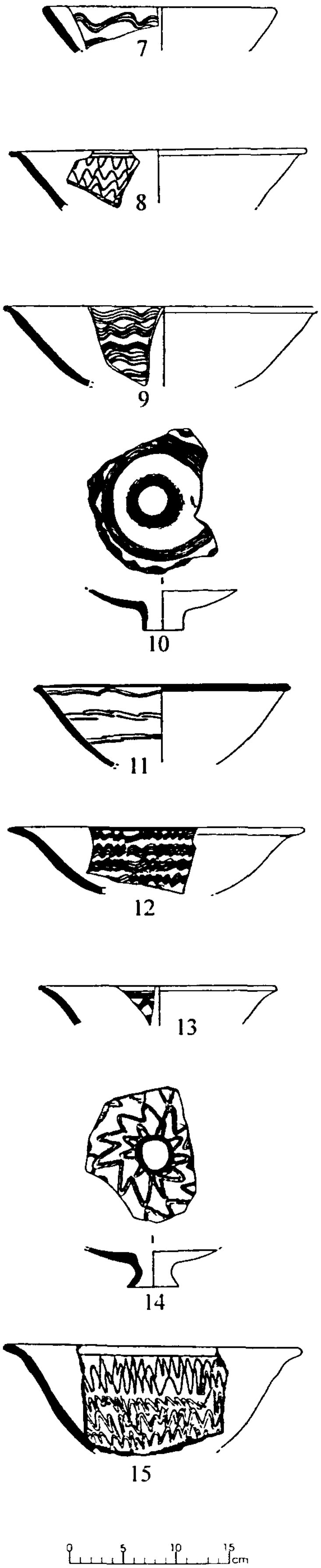
2. Ring base of a pot with a hole having incised lines around it, of medium to fine fabric, showing an oxidized core. From a mid-level of Period I.

3. Fragment of a dish of red ware with an out-turned featureless rim, decorated with incised wavy lines, of medium fabric, showing incompletely oxidized core. From a late level of Period I.

4. Fragment of a bowl of red ware with a thickened featureless rim, internally incised with two groups of wavy lines divided by parallel horizontal lines, of medium fabric, showing an oxidized core. From a mid-level of Period I.

5. Fragment of a dish of red ware with a featureless rim, decorated with two groups of wavy grooves of medium to fine fabric, showing an oxidized core. From a late level of Period I.

6. Fragment of a bowl of red ware with a featureless rim, internally decorated with deep incised wavy lines, of medium fabric, showing an oxidized core. From a late level of Period I.



7. Fragment of a dish of red ware with featureless rim, internally incised wavy lines, of medium fabric, showing an oxidized core. From a mid-level of Period I.

8. Fragment of a dish of red ware with slightly out-turned featureless rim, internally decorated with groups of incised wavy lines, of medium fabric, showing an oxidized core. From a late level of Period I.

9. Fragment of a bowl of red ware with slightly out-turned featureless rim, decorated with incised groups of wavy lines, of medium fabric, showing an oxidized core. From a late level of Period I.

10. Stand of a pot with a ring base, decorated around the hole with incised wavy and circular lines, of medium fabric, showing an oxidized core. From a mid-level of Period I.

11. Fragment of a bowl of red ware with featureless rim, externally and internally painted with black on the rim, internally decorated with incised wavy lines, of medium fabric, showing an oxidized core. From a mid-level of Period I.

12. Fragment of a dish with an out-turned featureless rim, internally decorated with incised groups of wavy lines, of medium fabric, showing an oxidized core. From a late level of Period I.

13. Fragment of a bowl of red ware with slightly out-turned featureless rim, internally decorated with incised horizontal and wavy lines, of medium fabric, showing an oxidized core. From a mid-level of Period I.

14. Small stand in red ware, having a hole with a ring base, internally decorated with incised floral design around the hole of the ring base, of medium fabric, showing an oxidized core. From an early level of Period I.

15. Fragment of a bowl of red ware with an out-turned featureless rim, internally decorated with incised wavy lines, of coarse fabric, showing an oxidized core. From an early level of Period I.

Fig. 52

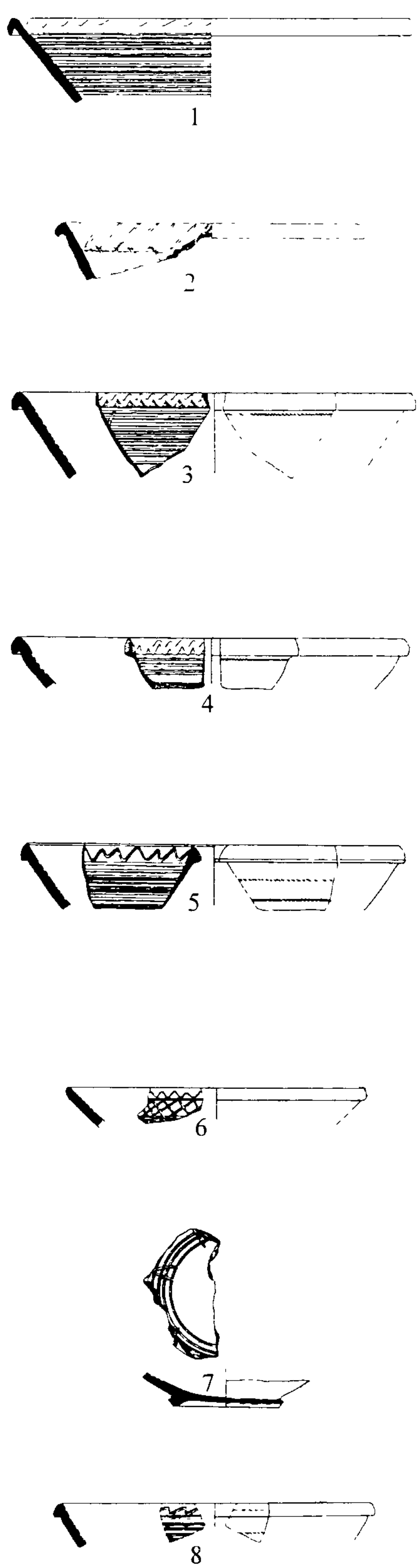


Fig. 53

FIG. 53

1. Fragment of a big basin of red ware with an out-turned flanged rim, internally decorated with deep incised wavy lines on the top lines and horizontal lines below, of medium fabric, showing an oxidized core. From a late level of Period I.

2. Fragment of a basin of red ware with a flanged rim, internally decorated with deep incised herring bone pattern, of medium fabric, showing an oxidized core. From a late level of Period I.

3. Fragment of a big basin of red ware with an out-turned rim, internally decorated with deep incised double wavy lines over horizontal incisions below (externally) a line of cord impression below the rim, of medium fabric, showing an oxidized core. From an early level of Period I.

4. Fragment of a big basin of red ware with an out-turned rim, internally decorated with deep incised wavy lines on the top and horizontal lines externally a cord design below the rim, of medium fabric, showing an oxidized core. From a late level of Period I.

5. Fragment of a big basin of red ware with an out-turned rim, internally decorated with deep incised wavy line on the top and horizontal lines below, externally having two lines of incised cord design, of medium fabric, showing an oxidized core. From an early level of Period I.

6. Fragment of a trough of red ware with a thickened featureless rim, internally decorated with incised wavy line on the top and chequer design on the lower portion, of medium fabric, showing an oxidized core. From a late level of Period I.

7. Fragment of a base with a ring stand of a basin of red ware, internally decorated with deep incised horizontal lines cut by V-shaped design, of medium fabric, showing an oxidized core. From a late level of Period I.

8. Fragment of a basin of red ware with an out-turned undercut rim, internally decorated with deep incised wavy lines on the top and horizontal lines below, externally having two cord-impressed lines, of medium fabric, showing an oxidized core. From an early level of Period I.



Fig. 53

9. Fragment of a deep base of trough of red ware with a flat base, internally decorated with incised criss-cross design, of medium fabric, showing an oxidized core. From a late level of Period I.

FIG. 54

1. Fragment of a basin of red ware with an out-turned featureless rim, internally decorated with incisions having groups of wavy lines, externally and internally painted with black band on the rim, of medium fabric, showing an oxidized core. From a mid-level of Period I.
2. Fragment of a basin of red ware with an out-turned rim and ridge under the rim, painted internally with black band, decorated internally with deeply incised wavy lines and horizontal lines, of medium fabric, showing an oxidized core. From an early level of Period I.
3. Fragment of a basin of red ware with an out-turned under-cut rim, painted externally with black bands and two lines of cord impressions, internally having incised wavy lines and horizontal grooves, of medium fabric, showing an oxidized core. From a mid-level of Period I.
4. Fragment of a basin of red ware with an out-turned rounded undercut rim, with a ridge, decorated internally with incised horizontal lines and roughly made checker design, of medium fabric, showing an oxidized core. From a late level of Period I.
5. Fragment of a basin of red ware with a slightly out-turned under-cut rim, externally painted with two black bands on the rim and an incised cord design, internally decorated with deep incised wavy lines and horizontal lines, of medium fabric, showing an incomplete oxidized greyish core. From a late level of Period I.
6. Fragment of a trough of red ware with a slightly out-turned featureless undercut rim and flat base, painted in black with band on the rim, internally decorated with groups of wavy and horizontal lines, of medium fabric, showing an oxidized core. From a late level of Period I.

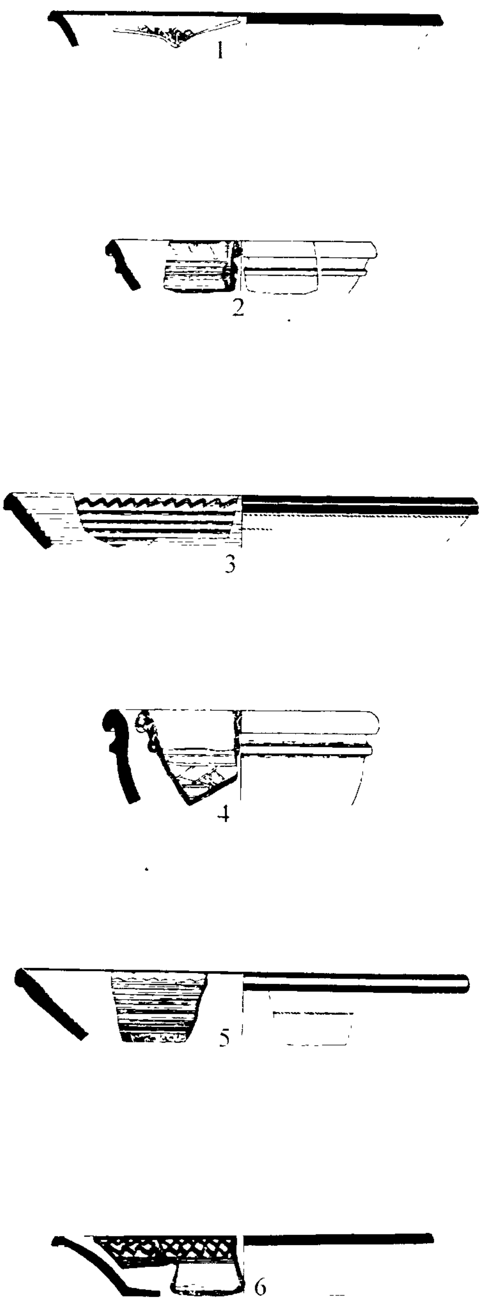


Fig. 54

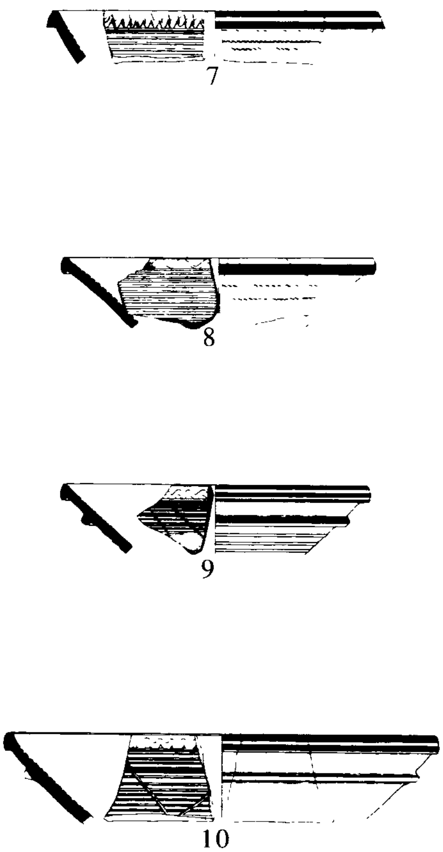


Fig. 54

7. Fragment of a basin of red ware with an out-turned undercut rim, painted externally with two black bands, three rows of cord impression, internally decorated with incised wavy and horizontal lines, of medium fabric, showing an oxidized core. From a late level of Period I.

8. Fragment of a basin of red ware with an out-turned undercut beaded rim, externally painted with black band and three rows of incised cord impression, internally decorated with incised wavy and horizontal lines, of medium fabric, showing an oxidized core. From a mid-level of Period I.

9. Fragment of a basin of red ware with an out-turned undercut rim and ridge on the shoulder, externally painted with four black bands, internally decorated with incised wavy lines and horizontal oblique lines, of medium fabric, showing an oxidized core. From an early level of Period I.

10. Fragment of a basin of red ware with an out-turned rim and having a ridge on the shoulder, externally painted in black with two bands, internally decorated with deep incisions making wavy lines and roughly wide V shaped design over horizontal lines, of medium fabric, showing an oxidized core. From a late level of Period I.

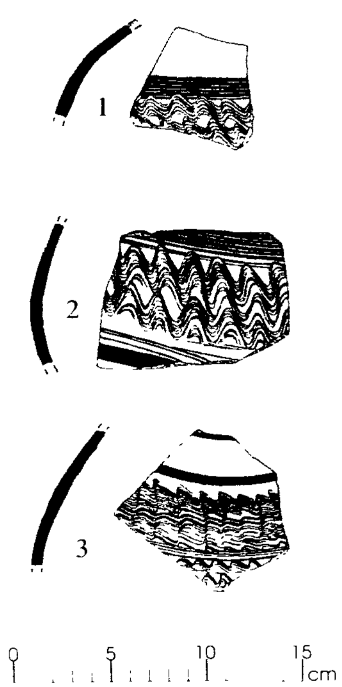


FIG. 55

FIG. 55

1. Fragment of middle portion of a jar of red ware, externally decorated with finely incised horizontal lines and group of wavy lines, of medium fabric, showing an oxidized core. From a late level of Period I.

2. Fragment of middle portion of a jar of red ware, externally decorated with incised horizontal lines and groups of wavy lines in groups and also having a black band below the wavy lines, of medium fabric, showing an oxidized core. From an early level of Period I.

3. Fragment of middle portion of a jar of red ware, painted with two black bands on the neck and externally lower portion decorated with groups of continuous incised wavy lines and horizontal lines, of medium fabric, showing an oxidized core. From an early level of Period I.

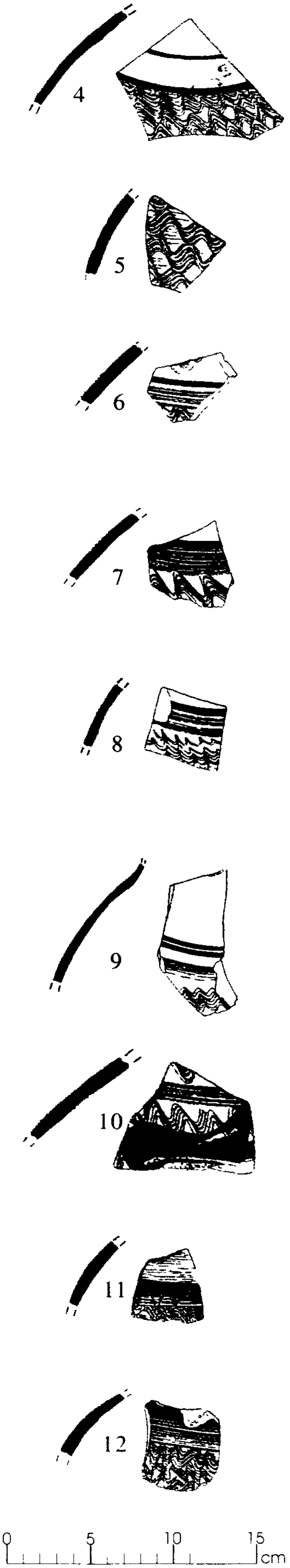


Fig. 55

4. Fragment of middle portion of a jar of red ware, painted with black bands, externally decorated with continuous incised wavy lines, of fine fabric, showing an oxidized core. From a late level of Period I.

5. Fragment of middle portion of a jar of red ware, externally decorated with incised wavy lines, of fine fabric, showing an oxidized core. From a late level of Period I.

6. Fragment of middle portion of a jar of red ware, externally decorated with black band and incised horizontal lines and wavy lines, of fine fabric, showing an oxidized core. From a mid-level of Period I.

7. Fragment of middle portion of a jar of red ware, painted with black band, externally decorated with incised multiple horizontal grooves and group of peaked wavy lines, of fine fabric, showing an oxidized core. From an early level of Period I.

8. Fragment of middle portion of a jar of red ware, painted with black band, externally decorated with incised grooves and wavy lines, of fine fabric, showing an oxidized core. From an early level of Period I.

9. Fragment of upper portion of a jar of red ware, painted in black bands, externally decorated with incised grooves and multiple wavy lines, of fine fabric, showing an oxidized core. From an early level of Period I.

10. Fragment of middle portion of a jar of red ware, painted in black over red, externally decorated with alternate incised grooves and wavy lines, of medium fabric, showing an oxidized core. From an early level of Period I.

11. Fragment of middle portion of a jar of red ware, painted with black band, externally decorated with incised lines and wavy lines, of fine fabric, showing an oxidized core. From an early level of Period I.

12. Fragment of middle portion of a jar of red ware, painted with black band, externally decorated with incised grooves and multiple wavy lines, of fine fabric, showing an oxidized core. From a late level of Period I.

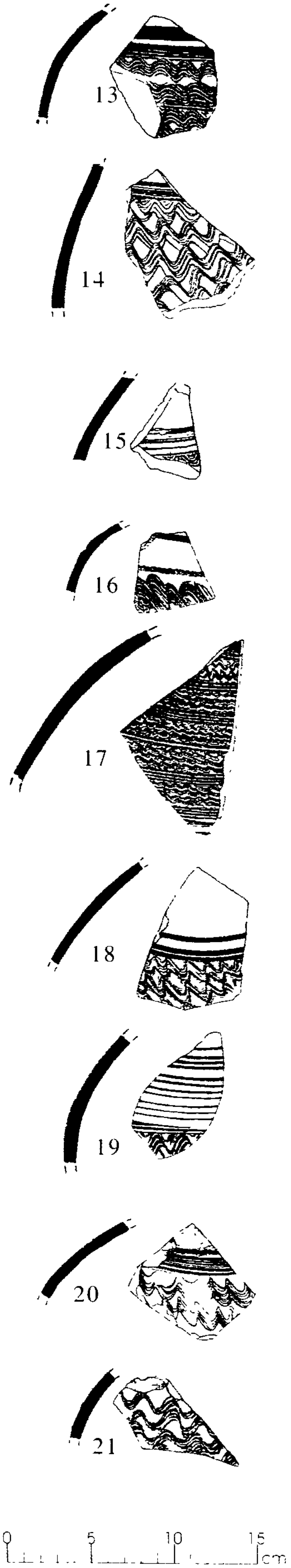


Fig. 55

13. Fragment of middle portion of a jar of red ware, painted with two black bands, externally decorated with alternate incised grooves and groups of wavy lines, of fine fabric, showing an oxidized core. From a late level of Period I.

14. Fragment of middle portion of a jar of red ware, externally decorated with incised grooves and groups of wavy lines, of fine fabric, showing an oxidized core. From a late level of Period I.

15. Fragment of middle portion of a jar of red ware, externally painted with black band and decorated with incised grooves and wavy lines, of fine fabric, showing an oxidized core. From a mid-level of Period I.

16. Fragment of middle portion of a jar of red ware, externally decorated with a black band, incised cord impression and a string line and groups of wavy lines, of fine fabric, showing an oxidized core. From a late level of Period I.

17. Fragment of middle portion of a jar of red ware, externally decorated with incised alternate design having horizontal grooves and multiple wavy lines in successive panels, of fine fabric, showing an oxidized core. From a late level of Period I.

18. Fragment of middle portion of a jar of red ware, painted in black with two bands, externally decorated with a series of incised wavy lines, of fine fabric, showing an oxidized core. From a late level of Period I.

19. Fragment of middle portion of a jar of red ware, externally decorated with incised grooves and groups of wavy lines below the grooves, of fine fabric, showing an oxidized core. From a late level of Period I.

20. Fragment of middle portion of a jar of red ware, externally decorated with a black band, incised grooves and groups of wavy lines, of fine fabric, showing an oxidized core. From an early level of Period I.

21. Fragment of middle portion of a jar of red ware, externally decorated with incised multiple wavy lines, of fine fabric, showing an oxidized core. From an early level of Period I.

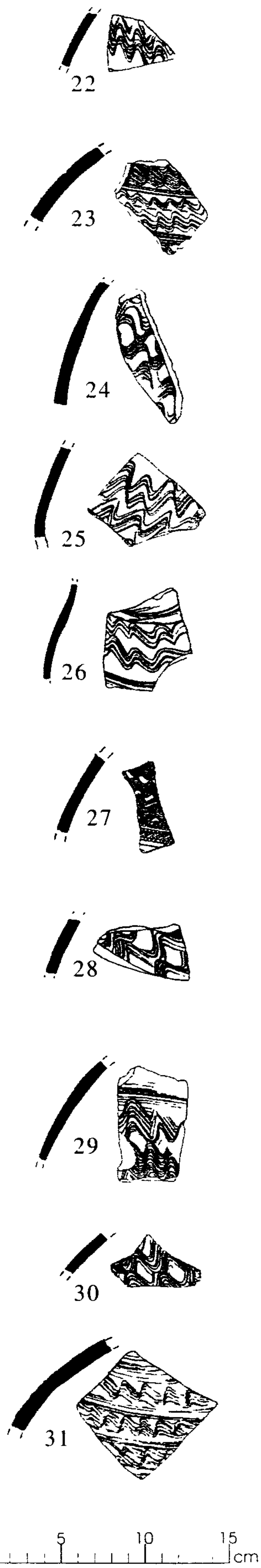


Fig. 55

22. Fragment of middle portion of a jar of red ware, externally decorated with incised groups of wavy lines, of medium fabric, showing an oxidized core. From a mid-level of Period I.

23. Fragment of a middle portion of a jar of red ware, externally decorated with incised wavy lines and grooves in panel, of medium fabric, showing an oxidized core. From an early level of Period I.

24. Fragment of middle portion of a jar of red ware, externally decorated with wavy lines, of fine fabric, showing an oxidized core. From a mid-level of Period I.

25. Fragment of middle portion of a jar of red ware, externally decorated with groups of incised wavy lines, of fine fabric, showing an oxidized core. From a late level of Period I.

26. Fragment of upper portion of a jar of red ware, externally decorated with panel of incised wavy lines, of fine fabric, showing an oxidized core. From a late level of Period I.

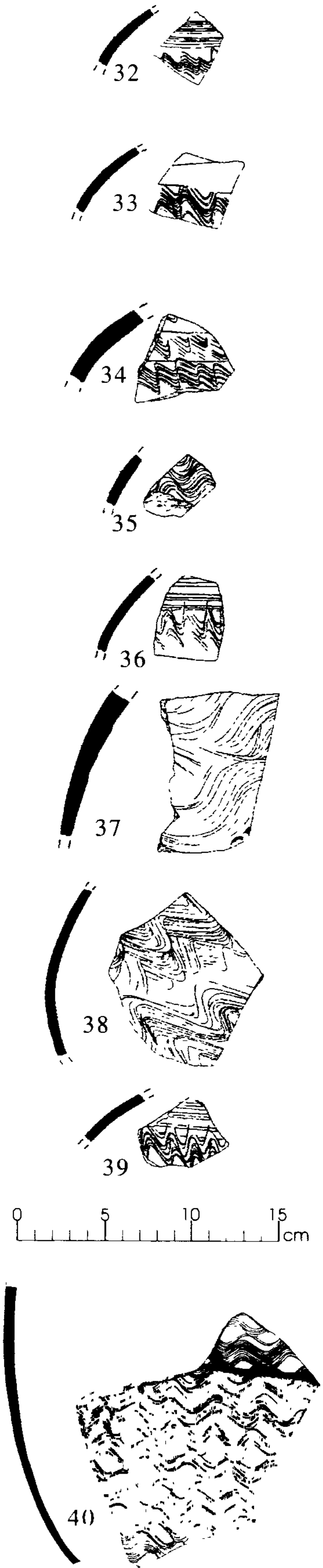
27. Fragment of middle portion of a jar of red ware, externally decorated with groups of incised multiple wavy lines followed by horizontal grooves, of fine fabric, showing an oxidized core. From a late level of Period I.

28. Fragment of middle portion of a jar of red ware, externally decorated with incised wavy lines, of fine fabric, showing an oxidized core. From a mid-level of Period I.

29. Fragment of middle portion of a jar of red ware, externally decorated with incised grooves and groups of wavy lines, of fine fabric, showing an oxidized core. From an early level of Period I.

30. Fragment of middle portion of a jar of red ware, externally decorated with group of incised wavy lines, of medium fabric, showing an oxidized core. From a mid-level of Period I.

31. Fragment of middle portion of a jar of red ware, externally decorated with incised alternate grooves and groups of wavy lines, of medium fabric, showing an oxidized core. From a mid-level of Period I.



32. Fragment of middle portion of a jar of red ware, externally decorated with incised grooves and multiple wavy lines, of fine fabric, showing an oxidized core. From a late level of Period I.

33. Fragment of middle portion of a jar of red ware, externally decorated with two incised grooves and wavy lines, of medium fabric, showing an oxidized core. From a late level of Period I.

34. Fragment of middle portion of a jar of red ware, externally decorated with incised panels of wavy lines, of coarse fabric, showing an incomplete oxidized core. From a late level of Period I.

35. Fragment of middle portion of a jar of red ware, externally decoarted with multiple wavy lines, of fine fabric, showing an oxidized core. From an early level of Period I.

36. Fragment of middle portion of a jar of red ware, externally decorated with incised grooves and multiple wavy lines, of fine fabric, showing an oxidized core. From an early level of Period I.

37. Fragment of middle portion of a jar of red ware, externally decorated with incised wavy lines, of fine fabric, showing an oxidized core. From a late level of Period I.

38. Fragment of middle portion of a jar of red ware, externally decorated with incised irregular wavy lines, of coarse fabric, showing an oxidized core. From a late level of Period I.

39. Fragment of middle portion of a jar of red ware, externally decorated with incised irregular wavy lines, of medium fabric, showing an oxidized core. From an early level of Period I.

40. Fragment of middle portion of a jar of red ware, externally decorated with black band and incised groups of wavy lines, of fine fabric, showing an oxidized core. From a late level of Period I.

Fig. 55

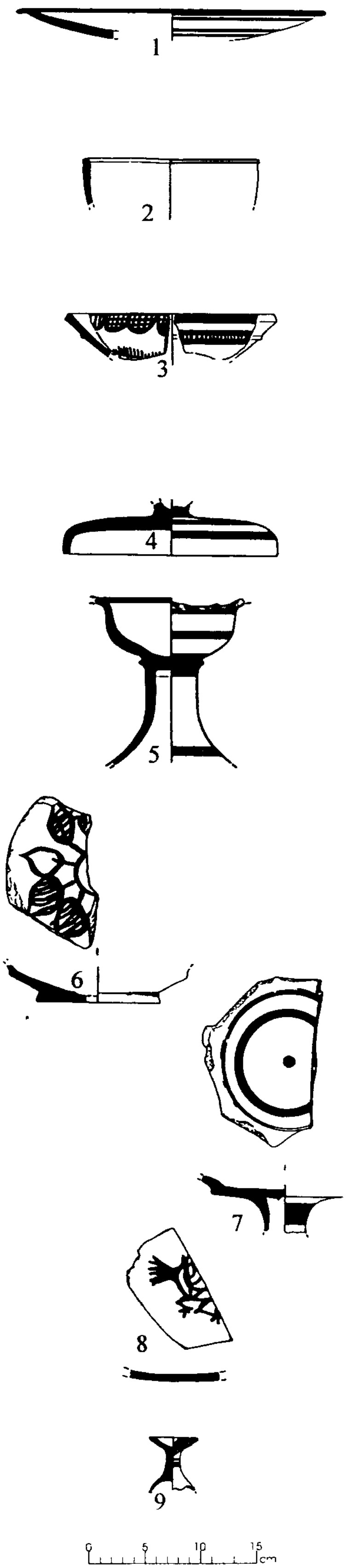
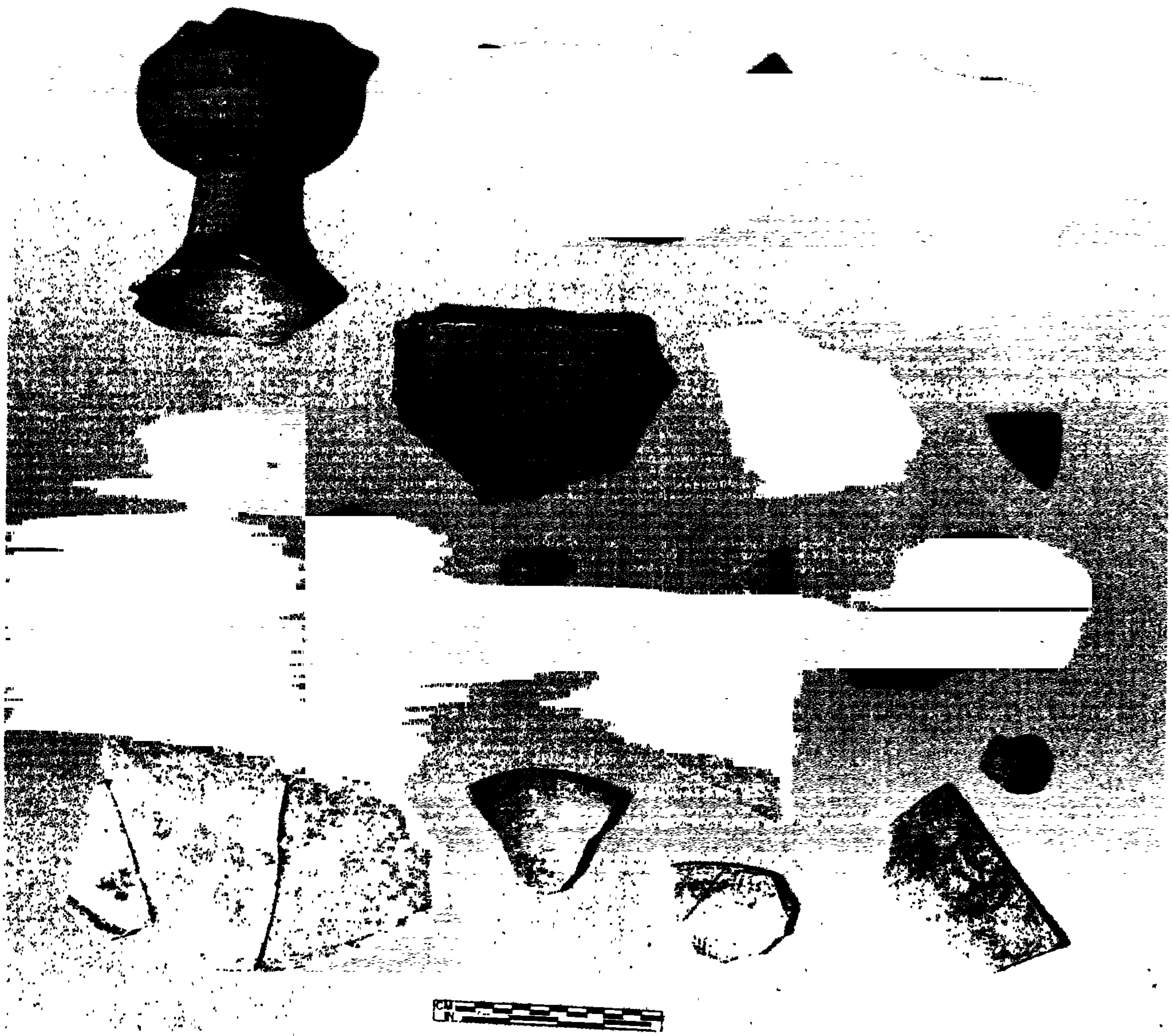


Fig. 56

FIG. 56
Fabric "E"

1. Fragment of a dish of red ware with an out-turned featureless rim, flat base and painted externally with black bands, of fine fabric, showing an oxidized core. From a mid-level of Period I.
2. Fragment of a bowl of red ware with a featureless rim and almost straight sides, of medium fabric, showing an oxidized core. From a late level of Period I.
3. Fragment of a bowl of red ware with featureless rim, painted internally showing continuous roughly made semi circle filled in with chequer design and oblique lines, externally painted with black bands and decorated with rope-like notched design within black bands, of medium fabric, showing an oxidized core. From a late level of Period I.
4. Fragment of lid of red ware with a prominent broken knob, painted externally with thick and thin black bands, of medium fabric, showing an oxidized core. From a mid-level of Period I.
5. Deep bowl-on-stand in buff colour with slightly out-turned broken rim, cylindrical slam, flaring base, painted and showing five horizontal bands in black, of medium fabric, showing an oxidized core. From an early level of Period I.
6. Fragment of a bowl of red ware with a footed base, painted internally with black showing *pipal* leaves around a circle, of fine fabric, showing an oxidized core. From a late level of Period I.
7. Fragment of a dish of red ware with a slightly out-turned rim, painted externally on the stem with thick black band and internally with a circle and a dot, of medium fabric, showing an oxidized core. From a late level of Period I.
8. Fragment of a dish of red ware painted internally showing some bird (fowl)-like design, of fine fabric, showing an oxidized core. From an early level of Period I.
9. Miniature dish-on-stand of red ware, externally painted with black showing loops on the rim, each having five lines and below horizontal bands, of fine fabric, showing an oxidized core. From a mid-level of Period I.



Pl. XXXII : *painted pottery Fabric E.* *See pp. 213-215*

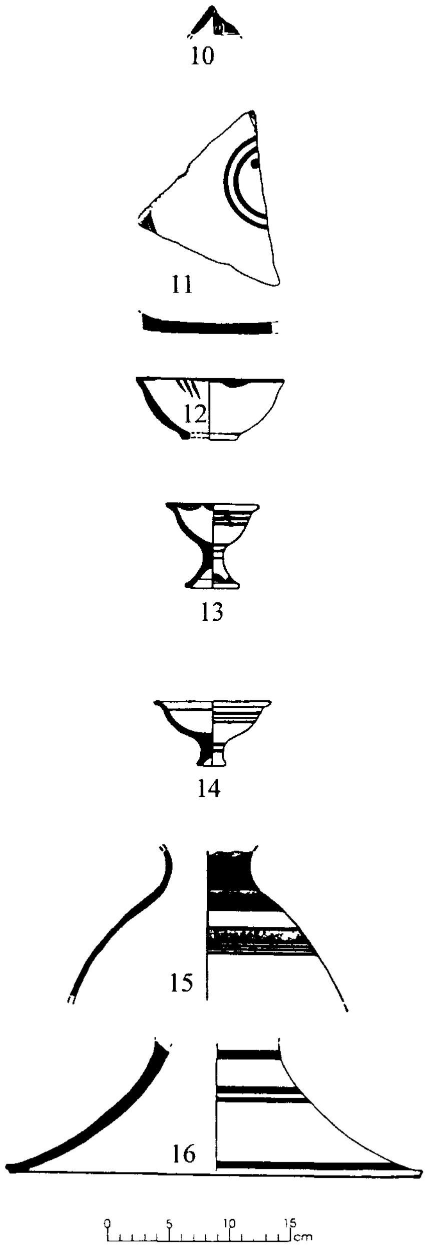


Fig. 56

10. Fragment of a miniature pot of red ware, painted externally with black vertical wavy lines, of medium fabric, showing an oxidized core. From a late level of Period I.

11. Fragment of a dish of red ware, painted internally with double circles and a dot, of medium fabric, showing an oxidized core. From a late level of Period I.

12. Bowl of red ware with a ring base, externally painted with black band on the rim and internally a band and strokes, of medium fabric, showing an oxidized core. From a late level of Period I.

13. Cup chalice-on-stand of red ware having a stand, painted externally with black bands and loops on the foot while internally painted with loops on the rim portion, of fine fabric, having an oxidized core. From a late level of Period I.

14. Cup of red ware with a slightly out-turned featureless rim and long footed base, externally painted with black bands, of medium fabric, having an oxidized core. From a late level of Period I.

15. Vase of reddish buff colour with broken rim, spherical body, painted in black and white showing thick and thin horizontal bands, of medium fabric, having an oxidized core. From a late level of Period I

16. Fragment of a stand of dish-on-stand of red ware, painted with black showing horizontal bands, of medium fabric, having an oxidized core. From an early level of Period I.

FIG. 57
Fabric "F"

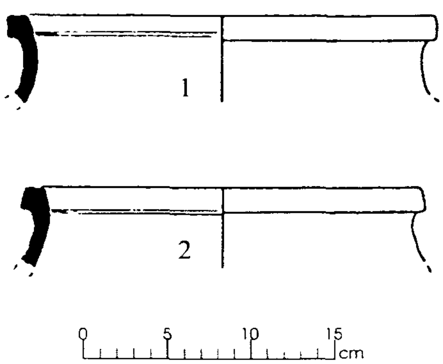
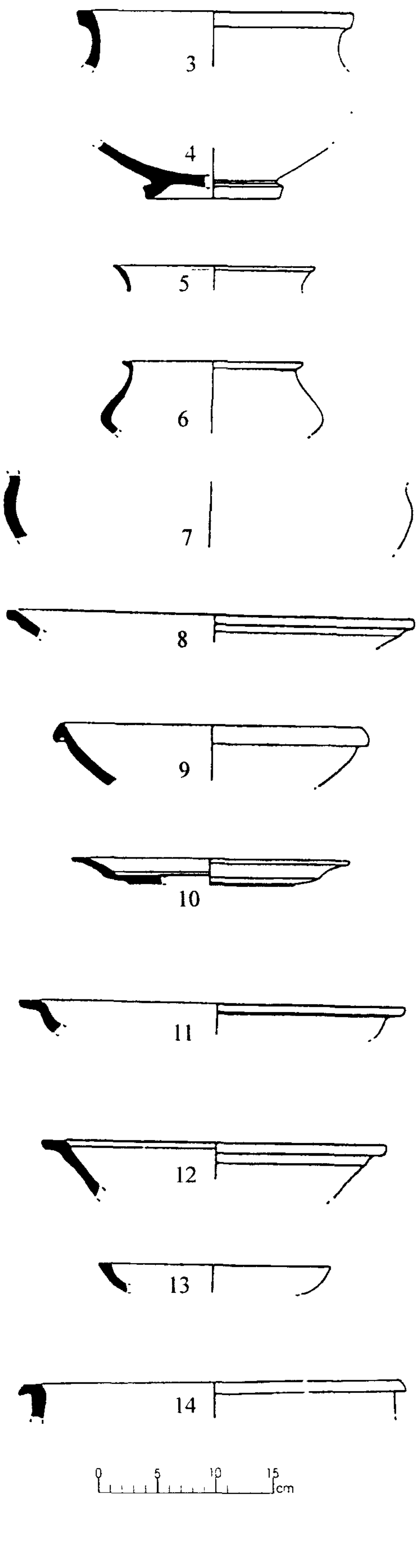


Fig. 57

1. Fragment of a jar of grey ware with an out-turned thickened rim, slightly concave neck, of medium fabric, showing an oxidized core. From a mid-level of Period I.

2. Fragment of a jar of grey ware with an out-turned thickened rim, concave neck, of medium fabric, showing an oxidized core. From a mid-level of Period I.



3. Fragment of a jar of grey ware with externally thickened featureless rim, concave neck, of medium fabric, showing an oxidized core. From a late level of Period I.

4. Fragment of a dish having ring stand in grey ware, of medium fabric, showing an oxidized core. From a late level of Period I.

5. Fragment of a jar vase of grey ware with a featureless rim, concave neck, of medium fabric, showing an oxidized core. From an early level of Period I.

6. Fragment of a *handi* of grey ware with an out-turned featureless rim, of medium fabric, showing an oxidized core. From a late level of Period I.

7. Fragment of an upper portion of a basin of grey war, of medium fabric, showing an oxidized core. From an early level of Period I.

8. Fragment of a dish of grey ware with featureless rim, of medium fabric, showing an oxidized core. From a late level of Period I.

9. Fragment of a dish of grey ware with an externally undercut rim, of medium fabric, showing an oxidized core. From a late level of Period I.

10. Fragment of a dish of grey ware with flaring out-turned featureless rim, internally flat and footed base, of medium fabric, showing an oxidized core. From a late level of Period I.

11. Fragment of a dish of grey ware with an out-turned featureless rim, of medium fabric, showing burnished surface on three sides. From a mid-level of Period I.

12. Fragment of a basin of grey ware with an out-turned featureless rim, of medium fabric, showing an oxidized core. From a late level of Period I.

13. Fragment of a bowl of grey ware with featureless rim, of medium fabric, showing an oxidized core. From a mid-level of Period I.

14. Fragment of a jar of grey ware with externally flanged rim and straight sides, of medium fabric, showing an oxidized core. From a mid-level of Period I.

Fig. 57

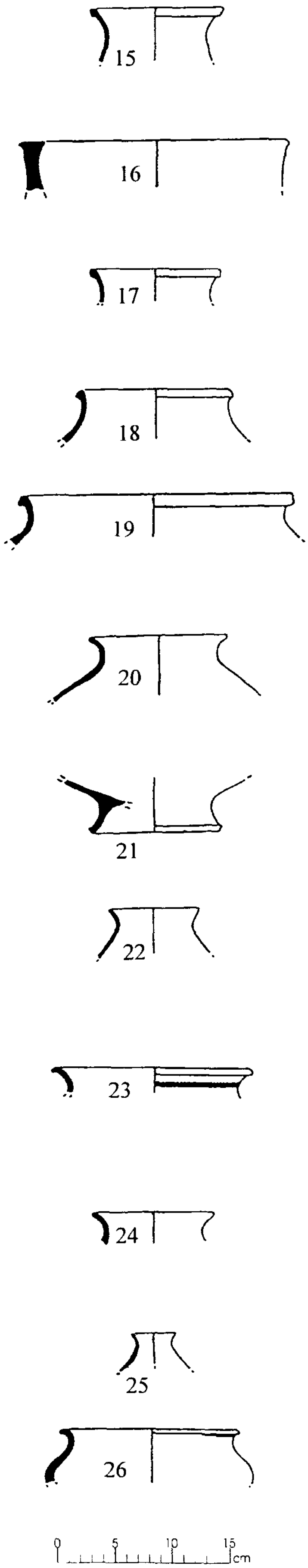


Fig. 57

15. Fragment of a jar of grey colour with an out-turned featureless rim, of coarse fabric, showing an oxidized core. From a late level of Period I.

16. Fragment of a trough of grey ware with a thickened featureless rim and straight sides, of coarse fabric, showing an oxidized core. From an early level of Period I.

17. Fragment of a jar of grey ware with an out-turned thickened rim, of coarse fabric, showing an oxidized core. From an early level of Period I.

18. Fragment of a jar of grey ware with an out-turned featureless rim, of medium fabric, showing an oxidized core. From a mid-level of Period I.

19. Fragment of a jar of grey ware with an out-turned featureless rim, concave neck, of medium fabric, showing an oxidized core. From a late level of Period I.

20. Fragment of a jar of grey ware with an out-turned featureless rim, concave neck, of coarse fabric, showing an oxidized core. From a late level of Period I.

21. Fragment of a small dish-on-stand of grey ware with a squat stand, of medium fabric, showing an oxidized core. From a late level of Period I.

22. Fragment of a jar of grey ware with a featureless rim, concave neck and oblique shoulders, of medium fabric, showing an oxidized core. From a late level of Period I.

23. Fragment of a jar of grey ware with slightly out-turned featureless rim, painted in white on the neck, of medium fabric, showing an oxidized core. From a mid-level of Period I.

24. Fragment of a jar of grey ware with a slightly out-turned featureless rim and concave neck, of medium fabric, showing an oxidized core. From a late level of Period I.

25. Fragment of a jar of grey ware with slightly out-turned featureless rim, of medium fabric, showing an oxidized core. From a late level of Period I.

26. Fragment of a *handi* of grey ware with an out-turned featureless rim, concave neck, of medium fabric, showing an oxidized core. From a late level of Period I.

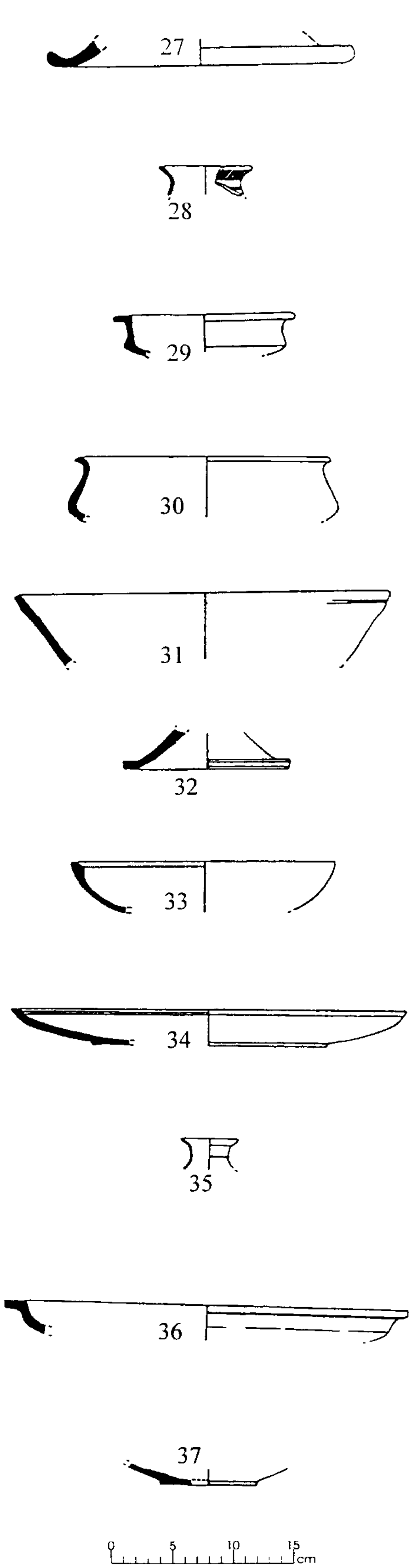


FIG. 57

27. Fragment of a dish of grey ware with an out-turned flaring rim, of coarse fabric, showing an oxidized core. From a late level of Period I.

28. Fragment of a small jar of grey ware with slightly out-turned featureless rim, painted in the exterior with white bands, of medium fabric, showing an oxidized core. From an early level of Period I.

29. Fragment of a bowl of grey ware with externally out-turned featureless rim and carinated base, of medium fabric, showing an oxidized core, burnished on both sides. From a late level of Period I.

30. Fragment of a *handi* of grey ware with an out-turned featureless rim and flat base, of medium fabric, showing an oxidized core. From a late level of Period I.

31. Fragment of a basin with featureless rim, of medium fabric, showing an oxidized core. From an early level of Period I.

32. Fragment of a stand of a dish-on-stand of grey ware, of fine fabric, showing an oxidized core with outer surface burnished. From a late level of Period I.

33. Fragment of a bowl of grey ware with a thickened featureless rim and flat base, of coarse fabric, showing an oxidized core. From a late level of Period I.

34. Fragment of a dish of grey ware with featureless rim, and with a footed base, of fine fabric, showing an oxidized core. From an early level of Period I.

35. Fragment of a small vase of grey ware with an out-turned featureless rim, and concave neck, of fine fabric, showing an oxidized core. From a mid-level of Period I.

36. Fragment of a bowl of grey ware with an out-turned flaring rim, of medium fabric, showing an oxidized core and a burnished surface on both sides. From a late level of Period I.

37. Fragment of a bowl of grey ware with a footed base, of medium fabric, showing an oxidized core. From a late level of Period I.

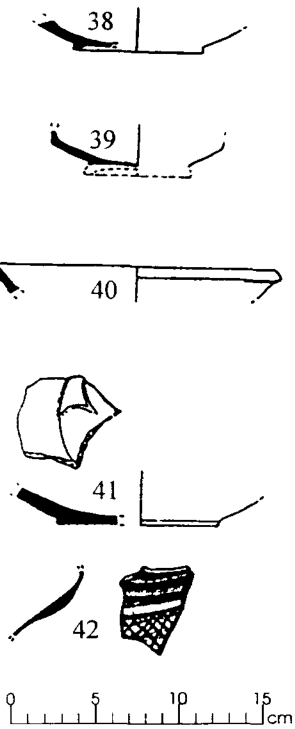


Fig. 57

38. Fragment of a bowl of grey ware with a ring base, of medium fabric, showing an oxidized core. From an early level of Period I.

39. Fragment of a bowl of grey ware with a ring base, of medium fabric, showing an oxidized core. From a late of Period I.

40. Fragment of a bowl of grey ware with a thickened rim, of medium fabric, showing an oxidized core. From a late level of Period I.

41. Fragment of a bowl of grey ware with a footed base showing some incised V-like marks on the base, of medium fabric, showing an oxidized core. From a late level of Period I.

42. Fragment of an upper portion of a jar of grey ware, painted in black and white showing horizontal bands and criss-cross design, of medium fabric, showing an oxidized core. From a late level of Period I.

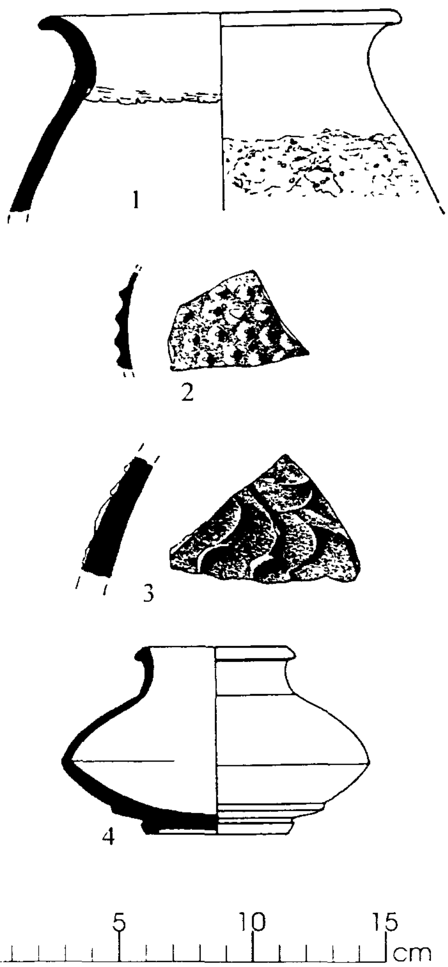


Fig. 58

FIG. 58

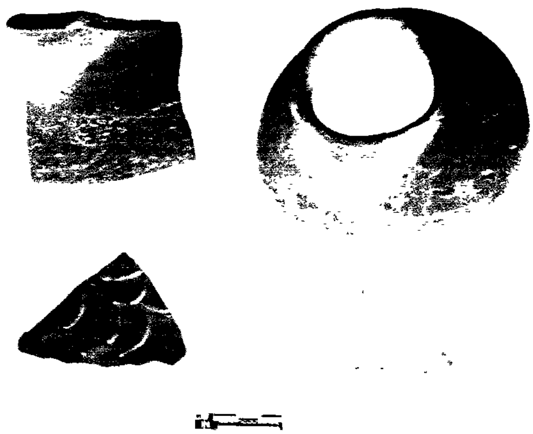
HAKRA AND OTHER WARES

1. Fragment of a jar of red ware showing an out-turned luted rim, the surface coated with thick clay mixed with whitish grains applied on the hand made surface, showing an oxidized fine core. From an early level of Period I.

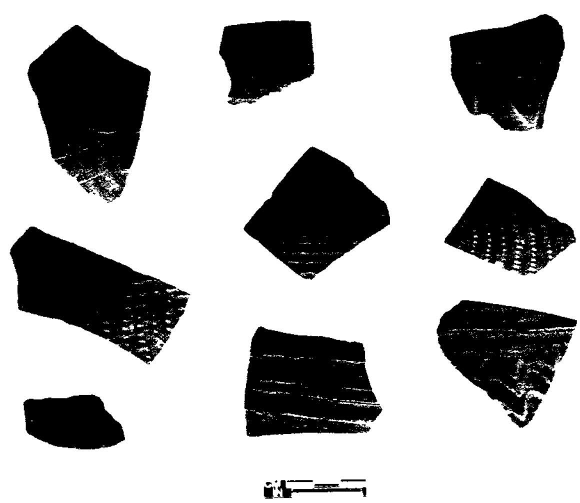
2. Fragment of a pot of greenish buff colour with a surface treated with applique technique, externally making knobbed design, of fine fabric, showing an oxidized core. From an early level of Period I.

3. Fragment of a mid-portion a grey ware jar, an applique design on the clay-coated surface, treated with red thick slip, showing an oxidized core. From a mid-level of Period I.

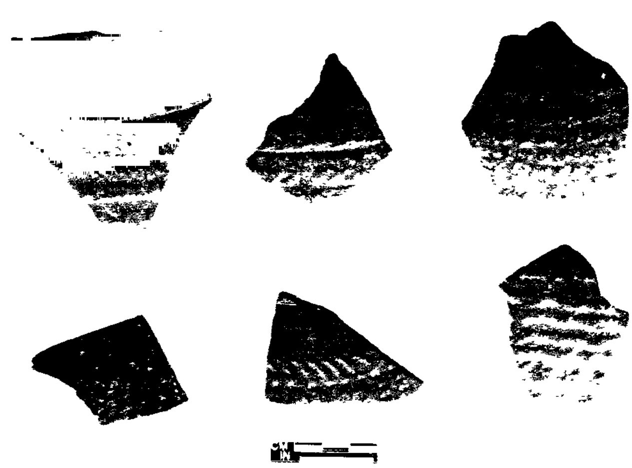
4. Small *handi* type of a blackish ware ,treated with grey slip with a slightly out-turned thickened rim, having a body with carination in the middle part with a thin body, having footed base, showing well oxidized core. From a late level of Period I.



Pl. XXXIII : *Hakra & other wares. See p. 219*



Pl. XXXIV : *Reserved slipped ware. See p. 221*



Pl. XXXV : *Impressed ware See p. 222*

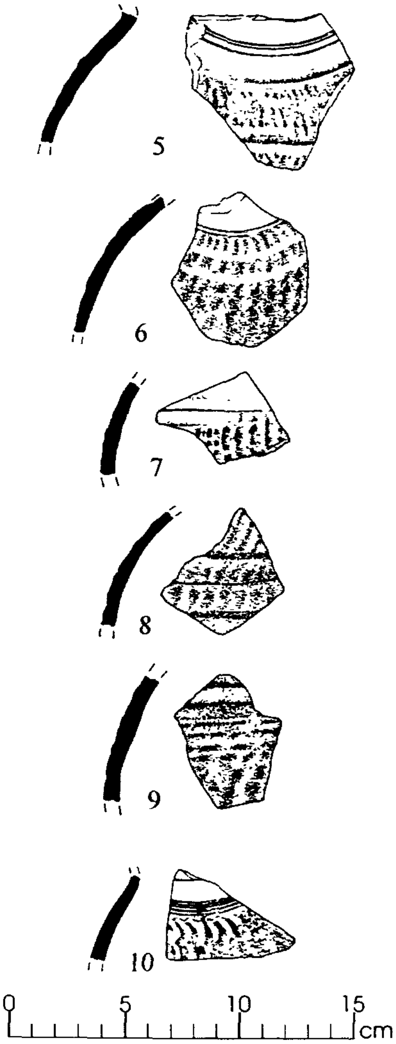


Fig. 58

5. Fragment of a vase of greenish buff ware with a self slip, impressed design on wet surface and incised lines on the shoulder showing a fine oxidized core. From an early level of Period I.
6. Fragment of a vase of greenish buff ware, with a self slip and impressed design on wet surface, showing a fine oxidized core. From an early level of Period I.
7. Fragment of a vase of greenish self slip with an impressed incised design on wet surface, showing a fine oxidized core, treated with buff slip. From an early level of Period I.
8. Fragment of a vase of greenish buff ware with a self slip, an impressed making an incised design on wet surface, showing a fine oxidized core. From a mid-level of Period I.
9. Fragment of a vase of greenish buff ware with a self slip making an impressed incised design on the wet surface, showing an oxidized fine core. From a mid-level of Period I.
10. Fragment of a vase of greenish buff ware with a self slip, making an impressed incised design on wet surface, a group of incised lines on the shoulder, showing an oxidized fine core, treated with buff slip. From a mid-level of Period I.

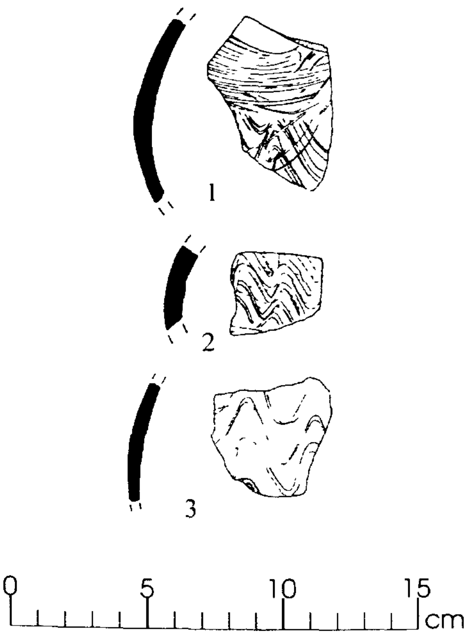


Fig. 59

FIG. 59

1. Fragment of a jar of red ware with reserved slip[1] making some irregular design, showing an oxidized core. From an early level of Period I.
2. Fragment of a jar of red ware with a buff surface and reserve slip, making group of wavy lines on wet surface, showing an oxidized core. From a middle level of Period I.
3. Fragment of a jar of red ware with reserved slip[2], showing rows of horizontal and vertical lines, having an oxidized core. From a mid-level of Period I.

1 Reserved slipped ware has been reported from Mohenjodaro, Lothal, Surkotada and many other Harappan sites in Kachchh. It has been reported from Sargonid levels at Brak in Khabur Valley at T Jite on the Balikh, at Ur and Nineveh. Arun Kumar, "Pottery" *Excavations at Surkotada and Explorations in Kutch*,ed Jagat Pati Joshi (New Delhi, 1990), p. 74

2 It is interesting to note that in Rajasthan Reserved slipped ware sherds have been reported from Balathal - a Chalcolithic site which the excavator has called a local manufacture. V.N. Misra, 'Balathal, a Chalcolithic settlement' in Mewar, Rajasthan, India, *South Asian Studies*, Vol. 13 (New Delhi, 1997), p. 265

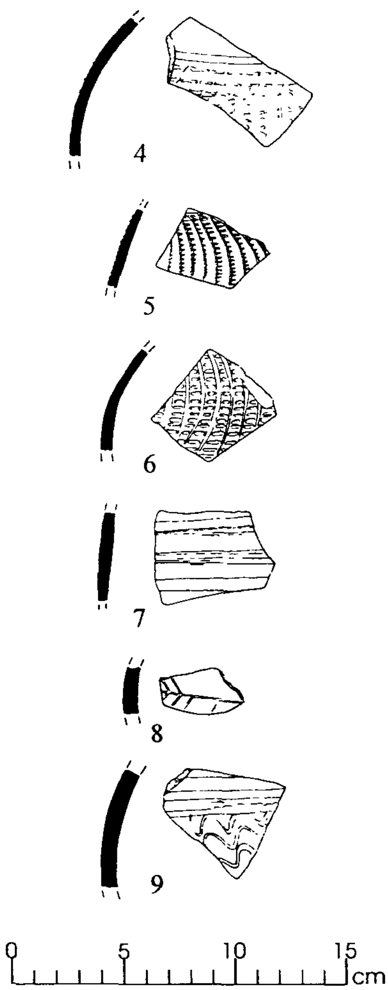
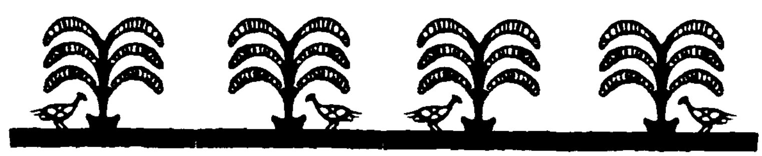


Fig. 59

4. Fragment of a vase of a greenish buff ware treated with self slip having impressed design on wet surface, showing a fine oxidized core. From an early level of Period I.
5. Fragment of a jar of grey ware treated with self slip and impressed design with a buff surface bearing horizontal and wavy lines, having a well oxidized core. From an early level of Period I.
6. Fragment of a jar of grey ware treated with self slip, having ladder like design with impressed continuous pattern, showing an oxidized core. From a mid-level of Period I.
7. Fragment of a vase of red ware with reserved slip showing a fine oxidized core. From a late level of Period I.
8. Fragment of a vase of grey ware making an impressed design now obliterated, showing a fine oxidized core. From a mid-level of Period I.
9. Fragment of vase red ware with reserved slip making wavy lines below a horizontal line, showing an oxidized core. From a mid-level of Period I.



MINOR ANTIQUITIES

11

Madhu Bala

MICROLITHS AND CHERT-BLADES

The Early Harappan levels at Kalibangan are marked by the availability of microliths and chert blades. In all twenty five microliths and twelve chert blades have been found. The microliths are made on chalcedony, agate and jasper. The other blades are made on chert. The microliths have side scrapers, points, serrated blades, blades and notched blades. These microliths appear to be a hangover of the late Stone Age. However no cores have been found.

(1) Semiprecious stones : small blades/flakes					(2) Chert
25					12
Points	Slide Scrapers	Notched flakes	Serated Blades	Blades/flakes	
2	4	2	2	15	12

MICROLITHS
(PL. XXXVI / FIG. 60)

These are described as below :-

1. Parallel-sided blade, triangular in section; wax coloured; chalcedony, butt end shows flake scar, working edges blunt due to use. From a middle level of Period I (KLB-1, Reg. No. 194)
2. Fragment of a parallel-sided blade, triangular in section; reddish agate. From an early level of Period I (KLB-1, Reg. No. 21059)
3. Fragment of a blade, triangular in section, having a notch on one side and serrated on the other. From a late level of Period I (KLB-1, Reg. No. 12450)
4. Fragment of a parallel-sided blade, triangular in section, agate. From a level late of Period I (KLB-1, Reg. No. 5253)
5. Fragment of a flake, parallel-sided blade serrated on one side, triangular in section; agate. From a late level of Period I (KLB-1, Reg. No. 2463).
6. Parallel-sided blade; triangular in section, chalcedony. From an early level of Period I (KLB-1, Reg. No. 20803).
7. Fragment of a parallel-sided blade, triangular in section, chalcedony. From a late level of Period I (KLB-1, Reg. No. 17942).
8. Fragment of a parallel-sided blade, triangular in section, agate. From a late level of Period I (KLB-1, Reg. No. 12974).
9. Fragment of a parallel-sided blade, serrated on one side, triangular in section, agate. From a middle level of Period I (KLB-1, Reg. No. 14402).
10. Fragment of a serrated blade, triangular in section, agate. From a middle level of Period I (KLB-1, Reg. No. 1067).
11. Fragment of a parallel-sided blade, backed on one side, roughly triangular in section, agate. From a middle level of Period I (KLB-1, Reg. No. 7778A).
12. Fragment of a blade broken at the longer end, fully retouched on one side and partly retouched on the other side to make a sharp point, triangular in section, chalcedony. From a middle level of Period I (KLB-1, Reg. No. 7779).
13. Fragment of a blade, serrated on one side, triangular in section, agate. From a middle level of Period I (KLB-1, Reg. No. 12450).
14. Fragment of a parallel-sided blade, triangular in section, reddish agate. From a middle level of Period I (KLB-1, Reg. No. 16568).
15. Fragment of a parallel-sided blade, triangular in section, whitish chalcedony.



Pl. XXXVI . *Microliths* *See pp. 223-228*

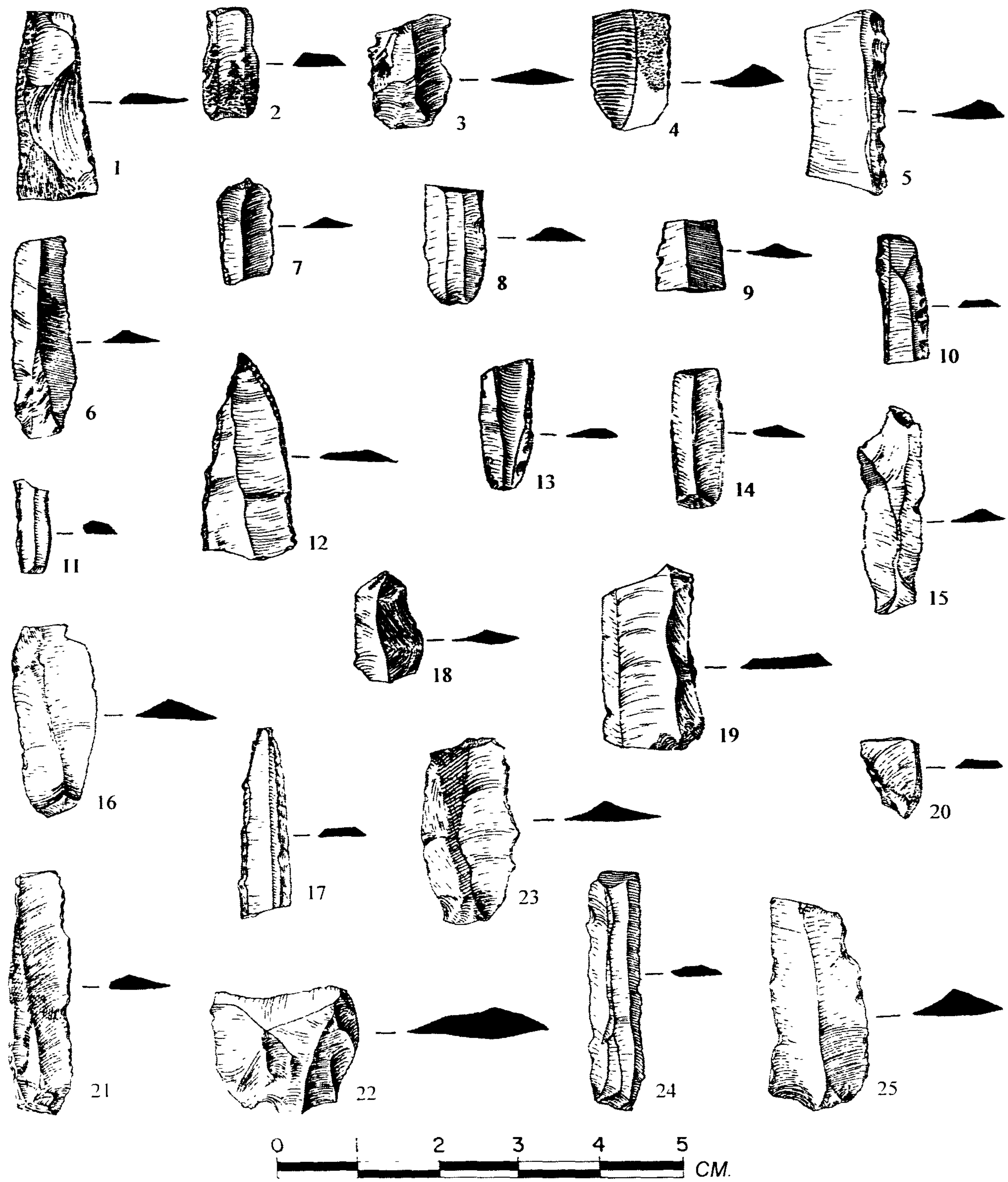
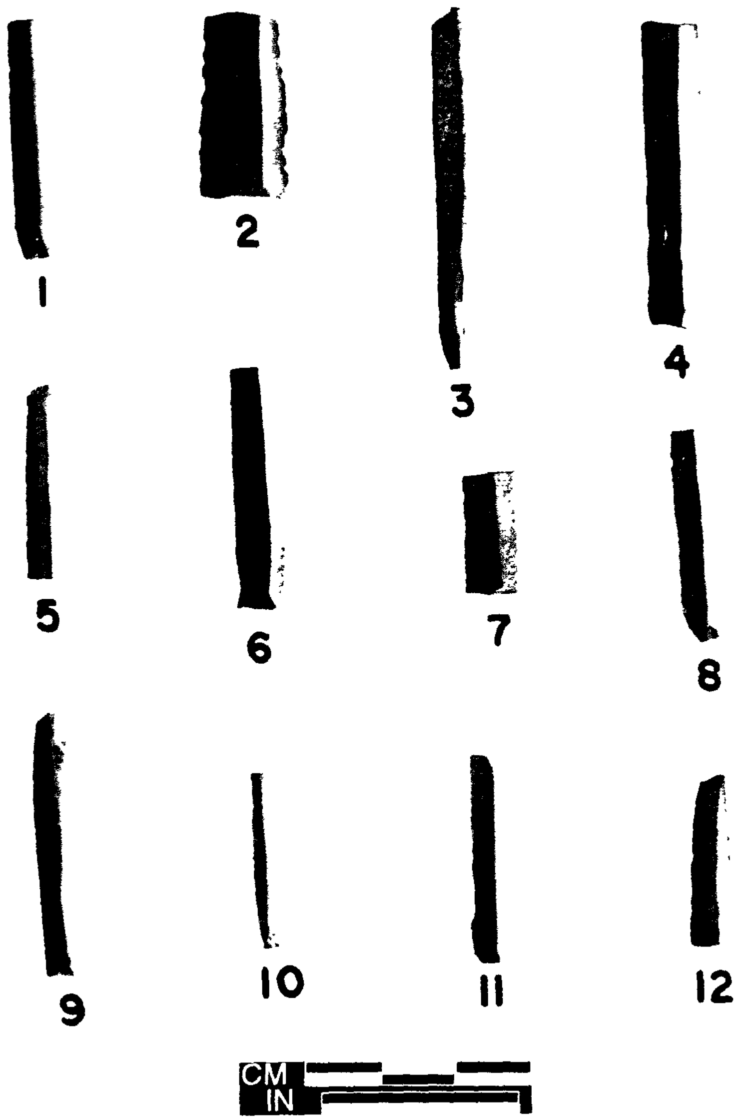


Fig. 60



Pl XXXVII : *Chert Blades. See p. 228*

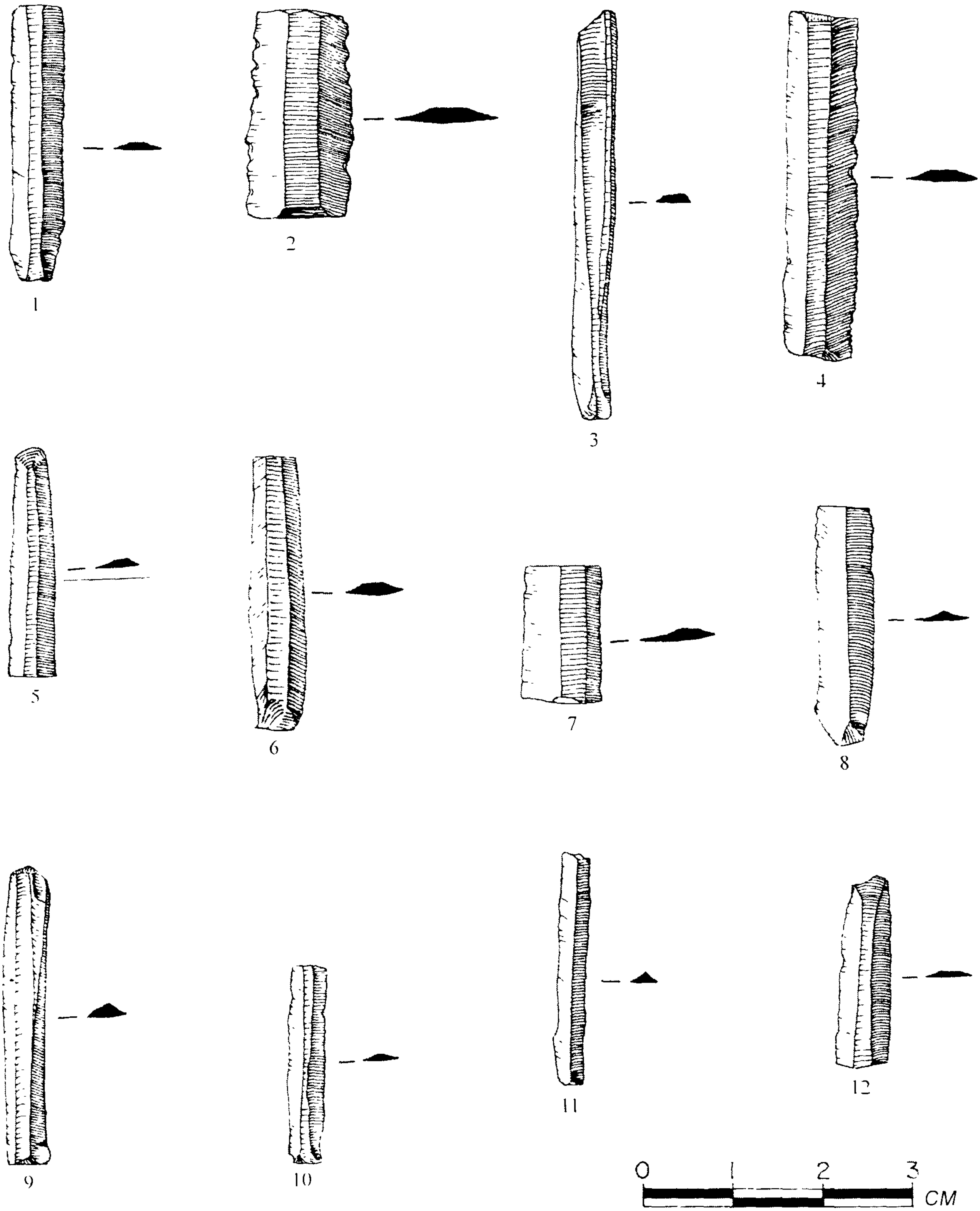


Fig. 61

From an early level of Period I (KLB-1, Reg. No. 20470).

16. Parallel-sided blade slightly retouched on both sides, trapezoidal in section, chalcedony. From an unstratified level of Period I (KLB-1, Reg. No. 13594)
17. Broken blade both sided serrated ending into a blunt point, triangular in section, agate, from an unstratified level (KLB-1, Reg. No. 13525).
18. Flake, triangular in section, chalcedony. From a middle level of Period I (KLB-1, Reg. No. 7778 B).
19. Parallel-sided blade, backed on one side, trapezoidal in section, agate. From a late level of Period I (KLB-1, Reg. No. 19544).
20. Fragment of a parallel-sided blade, trapezoidal in section, Agate. From a middle level of Period I (KLB-1, Reg. No. 8165).
21. Parallel-sided blade, retouched on both side, triangular in section, agate. From a late level of Period I (KLB-1, Reg. No. 6102 B).
22. Flake, notched, red jasper. From a middle level of Period I (KLB-1, Reg. No. 14402)
23. Blade, parallel-sided, retouched on both sides; triangular in section, agate. From an early level of Period I (KLB-1, Reg. No. 16203).
24. Parallel-sided blade, retouched on both sides, trapezoidal in section, chalcedony. From an early level of Period I (KLB-1, Reg. No. 21731).
25. Parallel-sided blade, retouched on both sides with prominent bulb, triangular in section, chalcedony. From a middle level of Period I (KLB-1, Reg. No. 13324).

CHERT BLADES
(PL. XXXVII / FIG. 61)

1. Parallel-sided blade with sharp un retouched margin, trapezoidal in section. From a late level on Period I (KLB-1, Reg. No. 15133).
2. Fragment of parallel-sided blade both side serrated, triangular in sections. From a middle level of Period I (KLB-1 Reg. No. 15142).
3. Thin parallel-sided blade un retouched, bulb is visible, triangular in section. Late level of Period I (KLB-1, Reg. No. 18675).
4. Parallel-sided blade, both ends broken one side backed, triangular in section. From a late level of Period I (KLB-1, Reg. No. 21726).
5. Thin parallel-sided blade, both margins not retouched, triangular in section. From a late level of Period I (KLB-1, Reg. No. 19000A).
6. Parallel-sided blade having a portion of bulb, unretouched, trapezoidal in section. From a late level of Period I (KLB-1, Reg. No. 18755).
7. Fragment of parallel-sided blade having serration in one margin. Triangular in section. From a late level of Period I (KLB-1, Reg. No. 18587A).
8. Fragment of parallel-sided blade, backed in one margin. Triangular in section. From a late level of Period I (KLB-1, Reg. No. 6833).
9. Parallel-sided blade, retaining one portion of the bulb, triangular in section. Slightly retouched in one side margin. From a middle level of Period I (KLB-1, Reg. No. 18068).
10. Thin parallel-sided blade, tip broken slightly retouched on one margin retouched. Triangular in section. From a late level of Period I (KLB-1, Reg. No. 19000 B).
11. Thin parallel-sided blade, tip broken, one margin retouched, triangular in section. From a late level of Period I (KLB-,1 Reg. No. 19000 C).
12. Parallel-sided blade, retouched on both sides, broken, trapezoidal in section. From a late level of Period I (KLB-1, Reg. No. 18587 B).

METAL OBJECTS
COPPER (PL. XXXVIII)

Fifty-six, copper objects have been found from the excavations of Early Harappan levels at Kalibangan. Distribution of various objects is as below :-

Selected specimens are described below:-

1	2	3	4	5	6	7	8	9	10	11	12	
Blades	Rods	Bangles	Rings	Arrow heads	Chisles	Wires	Pins	Lumps	Hooks	Needles	Fragments	Total
4	11	3	9	4	4	3	5	4	2	4	3	56

1. Fragment of a celt, thickened on one edge. From a late level of Period I (KLB-1, Reg. No. 5553).
2. Parasu-shaped object, thickened on the inner side. From an early level of Period I (KLB-1, Reg. No. 8164)[1].
3. Antimony rod thickened at both ends. From an early level of Period I (KLB-1, Reg. No. 18121).
4. Arrow-head. From a late level of Period I (KLB-1, Reg. No. 2387).
5. Arrow-head. From a middle level of Period I (KLB-1, Reg. No. 2312).
6. Ring thin. From a late level (KLB-1, Reg. No. 4558).
7. Fragmentary knife. From a middle level of Period I (KLB-1, Reg. No. 2473).
8. Fragmentary chisel. From an early level of Period I (KLB-1, Reg. No. 15613).
9. Bangle with a round section. From a middle level of Period I (KLB-1, Reg. No. 7701).

GOLD OBJECTS (PL. XXXIX)

Four gold objects have been found from the Early Harappan levels and these are described below :-

1. Fragment (almost half portion) of gold plated, long barrel, circular bead. From a middle level of Period I, (KLB-1 70/KLB/5).
2. Circular, disc bead. From an early level of Period I (KLB-1, Reg. No. 70/KLB-40).
3. Long, barrel, truncated, circular bead. From a late level of Period I (KLB-1, Reg. No. 70/KLB-52).
4. Standard, circular with axial tube made out of beaten gold sheet. Disc (broken in two pieces) reused as having two holes the other two holes, could not be completed but have depression for attempt at holing. From an early level of Period I (KLB-1, Reg. No. 70/KLB-15)[2].

TERRACOTTA OBJECTS

Forty-six terracotta objects have been found in the various levels of early Harappan period. The distribution of various categories of objects as below :-

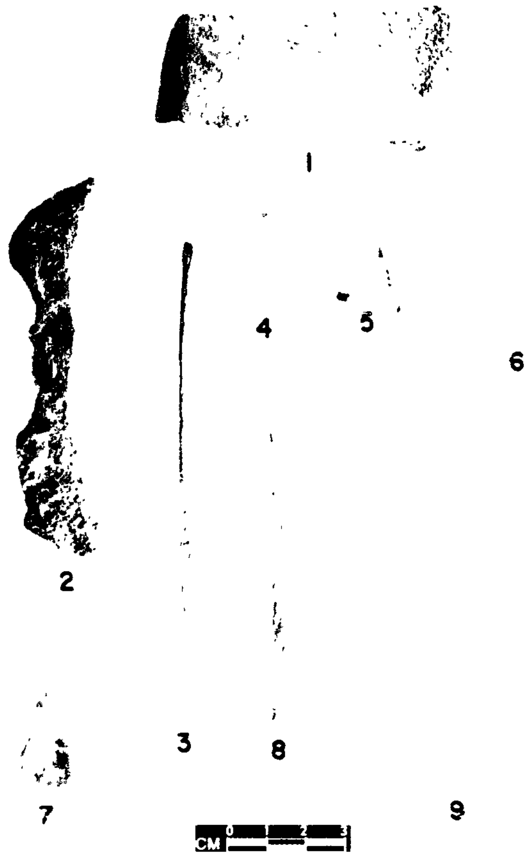
TERRACOTTA OBJECTS (PL. XL)

1. Miniature cake, having finger impression on both sides, circular in shape from an early level of Period I. (KLB- Reg. No. 118539).
2. Circular bead probably used for an animal, having perforation in the centre. From a middle level of Period I. (KLB-1, Reg. No. 16990).
3. Circular disc or bead in dark grey colour with a perforation in the centre with four

1	2	3	4	5	6	7	8	9	10	11	12
Bangles (Single)	Bangles (Double)	Wheels	Beads	Animal Figures	Human Figures	Cakes	Door socket	Stopper	Cots	Beads of animals	Total
17	2	5	5	5	1	5	1	2	1	2	46

1 Similar object has been reported from Mitathal and Rojdi . Suraj Bhan, *Excavations at Mitathal* (1968) *and other explorations in the Satluj-Yamuna divide* (Kurukshetra, 1975), fig 14a, Gregory L. Possehl and M H Rawal, *Harappan Civilization and Rojdi*, (Delhi 1989), p. 162.

2 Similar circular (disc) with axial tube have been found from Lothal from Period A at Lothal . Also occurs at Royal Cemetery at Ur S R Rao, "*Lothal, A Harappan Port Town*, 1955-1962", *MASI No* 78, Vol II p 635, pl CCX(VI, 1-9)



Pl XXXVIII : copper objects. See pp. 228-229



Pl XXXIX : gold objects. See p. 229

spokes engraved around the perforation, and two graffiti marks on the exterior with fine polished surface. From an early level of Period I. (KLB-1, Reg. No. 7474).

4. Miniature wheel in red colour with a hub on one side, hand-made. From an early level of Period I. (KLB-1, Reg. No. 6974).
5. Fragmentary bead. From a middle level of Period I. (KLB-1, Reg. No. 19368).
6. Hopscotch, circular in shape. From a late level of Period I. (KLB-1, Reg. No. 19368).
7. Circular bead, probably for animals, having perforation in the centre. From an early level of Period I. (KLB-1, Reg. No. 4848).
8. Hopscotch in red colour, circular in shape. From a late level of Period I. (KLB-1, Reg. No. 7412).
9. Stopper in red colour having bud-shaped top. From an early level of Period I. (KLB-1, Reg. No. 6559).
10. Broken hubbed wheel in grey colour. From a middle level of Period I (KLB-1, Reg. No. 7479).
11. Miniature wheel in grey colour having hub on one side with a perforation. From a middle level of Period I (KLB-1, Reg. No. 16097).

TERRACOTTA ANIMAL FIGURINES (PL. XLI)

The excavation has yielded only four hand modelled terracotta animal figs. From Period I. All these figs are bulls with a characteristic feature of having joined legs in the hind part.

1. Bull having hump, with joined hind legs and long tail. From an early level of Period I. (KLB-1, Reg. No. 7226).
2. Bull with a prominent-hump, hind legs and broken tail. From an early level of Period I. (KLB-1, Reg. No. 18340).
3. Bull with pinched up hump, ears and joined hind legs. From an early level of Period I. (KLB-1, Reg. No. 6470).
4. Small bull with a prominent pinched up hump, small tail and joined hind legs. From an early level of Period I (KLB-1, Reg. No.-14985).

TERRACOTTA HOMO-FIGURINE (PL. XLII)

Only one hand-made human figure has been found in the Early Harappan levels.

Hand modelled human figure with pinched up face and showing arms From mid-level of Period-I (KLB-1, Reg. No 18529).

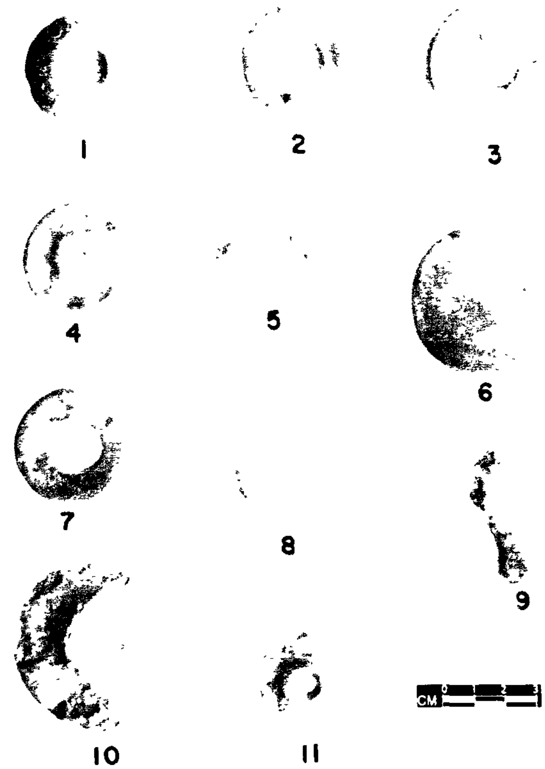
TERRACOTTA CAKES (PL. XLIII)

Few cakes have been found in the Early Harappan levels out of these five specimens have been described below. Round, ovoid and triangular cakes have been found No mushtika type cake was found :-

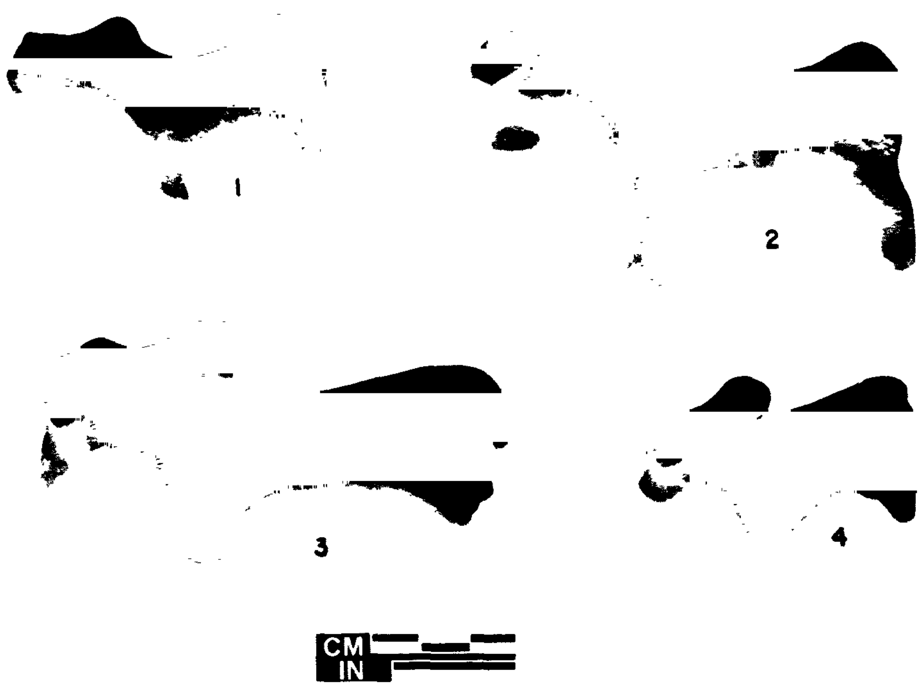
1. Cake, circular, with finger impression on both sides. From a middle level of Period I (KLB-1, Reg. No. 21728).
2. Cake(broken), circular, with finger impression on one side. From a middle level of Period I (KLB-1, Reg. No. 9705)
3. Cake, fragmentary, triangular. From a middle level of Period I (KLB-1, Reg. No. 9704).
4. Cake, ovoid, finger impression on both sides. From an early level of Period I (KLB-1, Reg. No. 21729).
5. Cake, fragmentary, triangular. From a middle level of Period I (KLB-1, Reg. No. 8197).

TERRACOTTA COT (PL. XLIV / FIG. 62)

1. Fragment of a toy-cot with pinched up upper corner ends having elaborate designs in white background. It consists of concentric semi circles at the pinched up corners with festoon-like designs on the sides with a big concentric dotted circle enclosing a big white filled up circle The entire design is compartmented with horizontal designs of criss-cross within two pairs of parallel lines From an



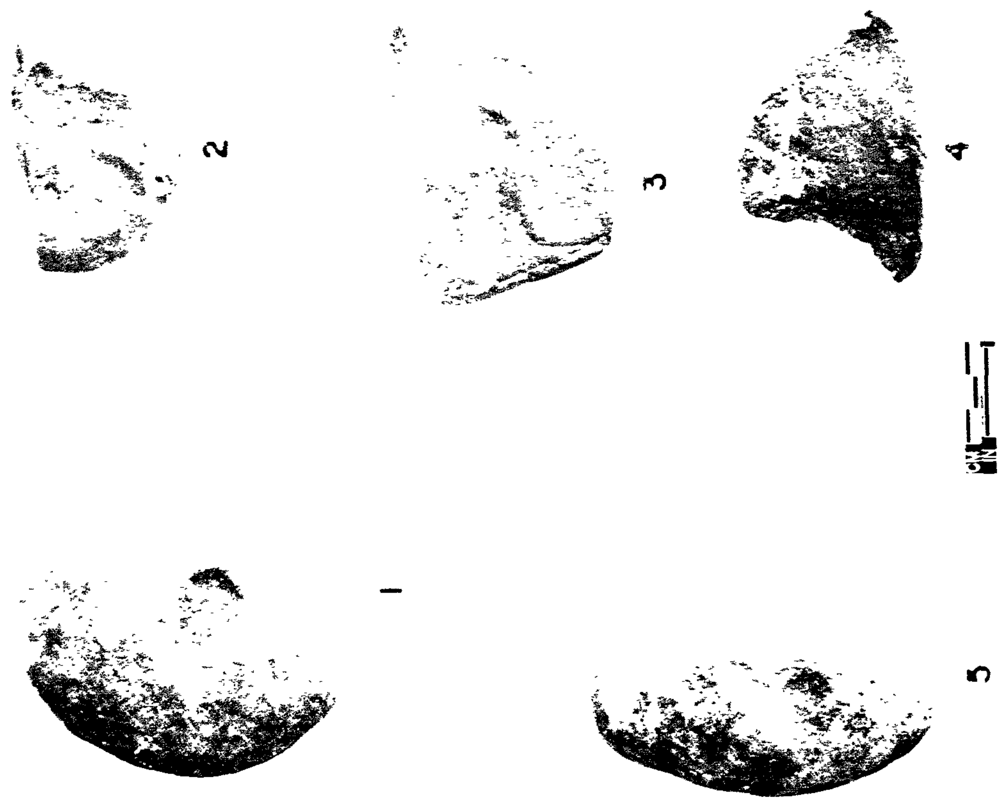
Pl. XL : *terracotta objects. See pp. 229 & 231*



Pl. XLI . *terracotta animal figurines. See p. 231*



Pl. XLII : *terracotta homo-figurine.* *See p. 231*



Pl. XLIII : *terracotta cakes.* *See p. 231*

unstratified level of period I. (KLB-1, Reg. No. 14514)[1].

TERRACOTTA BALLS
(PL. XLV)

From the excavated Early Harappan levels only three terracotta balls were recovered. The illustrated specimens are as following.

1. Ball, medium in size, circular in shape. From an early level of Period I (KLB-1, Reg. No. 4126).
2. Ball, medium in size, circular in shape. From an early level of Period I (KLB-1, Reg. No. 3794).
3. Ball, small in size, decorated with nail incisions. From a late level of Period I (KLB-1, Reg. No. 4178).

FRAGMENT OF A POT DECORATED WITH STEATITE BEADS AND TERRACOTTA DEEP CUP (DOOR DEVICE) (PL. XLVI A&B)

1. Fragmentary miniature pot having a slightly out-turned rim of pre Harappan fabric 'A', decorated with fifty small steatite beads which are incised obviously in a pre-firing stage. From a late level of Period I (KLB-1, Reg. No. 21727).
2. Terracotta, hand-made, deep, thick cup probably used for rotating the door-tinon. From an early level of Period I (KLB-1, Reg. No. 20588).

BANGLES[2]
(PL. XLVII)

Bangles in shell, terracotta and copper were also recovered from Early Harappan levels. Amongst these following are illustrated as below :-

1. Fragment of a terracotta bangle, square in section. From an early level of Period I, (KLB-1, Reg. No. 7667).
2. Fragment of a shell bangle, irregular in shape, rectangular in section. From an early level of Period-I (KLB-1, Reg. No. 6745).
3. Fragment of a double terracotta bangle, convex in section. From a mid level of Period I (KLB-1, Reg. No. 8075).
4. Fragment of a shell bangle, convex in section, From an early level of Period I (KLB-1, Reg. No. 8712).
5. Fragment of a terracotta multiple bangle, rectangular in section. From an early level of Period I (KLB-1, Reg. No. 7074).
6. Fragment of a shell bangle, irregular in shape rectangular in section. From an Early level of Period I (KLB-1, Reg. No. 16411).

BONE AND IVORY OBJECTS
(PL. XLVIII)

The excavations have yielded very few bone and ivory objects from Early Harappan levels. The illustrated objects are as below :-

1. Bone, stylus from a mid level Period 1 (KLB-1, Reg. No.-8067)
2. Ivory, small wheel having a hub. From an early level of Period I (KLB-1, Reg. No. -15579).
3. Ivory, spatula. From an early level of Period I (KLB-1, Reg. No.-8167).

STONE OBJECTS

The stone objects found in the Early Harappan levels include saddle querns, flat pestles, pestles with planoconvex section, pounders with biconvex section, pounder with flat base, bicone pestles and sling balls.

While saddle-querns, pestles and poundes might have been used for grinding grains of different types and making paste, the saddle querns are of middle and small

1 Quite a few such toy-cots have been found in the 'Harappan level at Kalibangan. One such cot is reported from Susa and kept in the Central Antiquities Collection, Purana Jula, Archaeological Survey of India, New Delhi. The tradition of such decorated *Darries* is still in vogue in Punjab, Rajasthan and Haryana as a bed-spread. Even similar designs are still available on *Darries*. Madhubala, 'Some unique Antiquities and Pottery from Kalibangan, in *Facets of Indian Civilization Recent Perspectives, Essays in Honour of Prof B B Lal*, ed Jagat Pati Joshi (Delhi 1997), pp 104-105

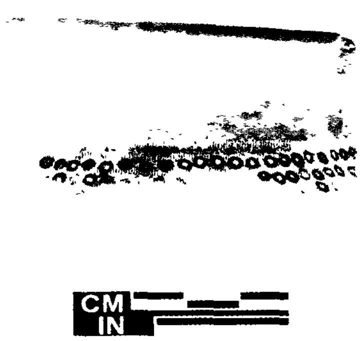
2 Also see under Metal Objects



Pl. XLIV : *terracotta cot. See pp. 231 & 234*



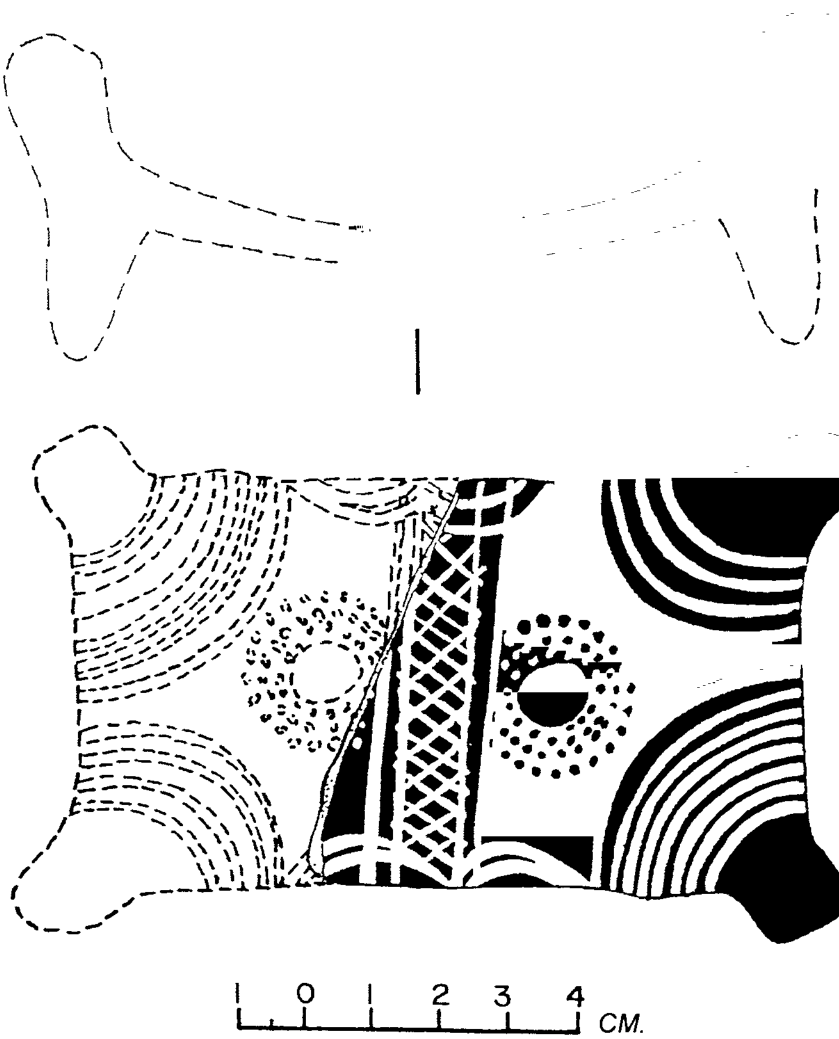
Pl. XLV : *terracotta balls. See p. 234*



Pl. XLVI A : *potsherd decorated with steatite beads. See p. 234*



Pl. XLVI B : *terracotta cup (door device). See p. 234*



Fi : 62 *See pp 231 & 234*

sizes. Bigger saddle-querns are almost absent.

STONE OBJECTS

1	2	3	4	5	6	7
Saddle Quens	Flat Pestles	Pestles with Plano-convex section	Pounders with bi-convex (both sides flat)	Pounders with flat base	Bicone pestles	Sling Balls
16	2	11	3	2	1	6

SADDLE QUERNS (PL. XLIX)

1. Saddle quern, sandstone, length 46.5 cm x width 8 cm x thickness 3 cm working side concave and smooth due to use. From an early level of Period I (KLB-1, Reg. No. 8202).
2. Fragment of saddle quern, sand stone, concave smooth working side. Bottom rough. Size: length 19 cm, width 10cm and thickness 4 cm. From an early level of Period I. (KLB-1, Reg. No. 20304).
3. Fragment of a saddle quern length 10 cm width 15 cm, thickness 5 cm. From a middle level of Period I. (KLB-1, Reg. No. 20608).

PESTLES AND POUNDERS (PL. L)

1. Pounder, sandstone round with biconvex section flat on both sides. From an early level of Period I (KLB-1, Reg. No. 17994).
2. Pestle, sandstone, roughly rectangular, convex working side. From an early level of Period-I (KLB-1, Reg. No. 20677).
3. Pestle, sandstone, oblong, with both sides flat. From a middle level of Period I. (KLB-1, Reg. No. 20305).
4. Pestle, sandstone, with one side convex due to use. From a middle level of Period I (KLB-1, Reg. No. 20647).
5. Pounder-cum-pestle, granite stone with one side flat due to use. From a middle level of period I (KLB-1, Reg. No. 7199).
6. Pounder, granite with multiple sides, due to use, roughly round. From an unstratified level of Period I (KLB-1, Reg. NO. 19389).

SLING BALLS (PL. LI)

1. Sling ball, sand stone, spherical, smooth. From a middle level of Period I (KLB-1, Reg. No. 5490).
2. Sling ball, sand stone, spherical, smooth. From a middle level of Period I (KLB-1, Reg. No. 20656).
3. Sling ball, sand stone, spherical, rough. From a middle level of Period I (KLB-1, Reg. No. 7558).
4. Sling ball, sand stone, spherical, rough. From a late level of Period I (KLB-1, Reg. No. 19214).
5. Sling ball, sand stone, spherical, rough, from a late level of Period I. (KLB-1, Reg. No. 20650).

MACE-HEADS (PL. LII)

Two mace-heads or weights for digging sticks have been found. These are made in greenish schist which appear to be imported as it is not available in the neighbourhood.

1. Fragment of a mace-head, circular, concavo-convex in section. With a circular hole, having hour glass perforation. From a middle level of Period I (KLB-1, Reg. No. 6136).
2. Fragment of a mace-head circular, concavo-convex in section with a circular perforation. From a middle level of Period I (KLB-1, Reg. No. 136).

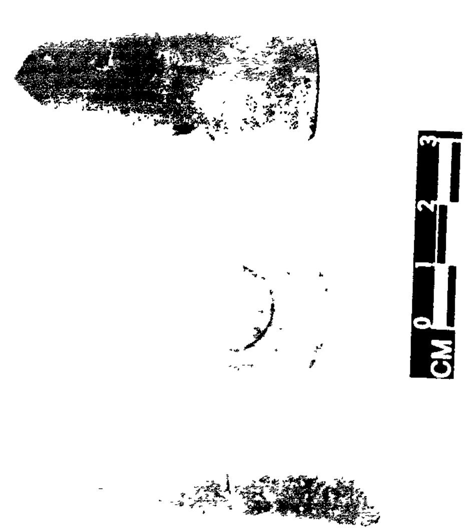
STONE SQUARE OBJECT (WEIGHT ?) (PL. LIII)

A square stone-object has been found which may have been used as a weight (?)

Sandstone, square in shape, 3x3x1 cm. From a middle level of Period I (KLB-1, Reg. No. 3191).



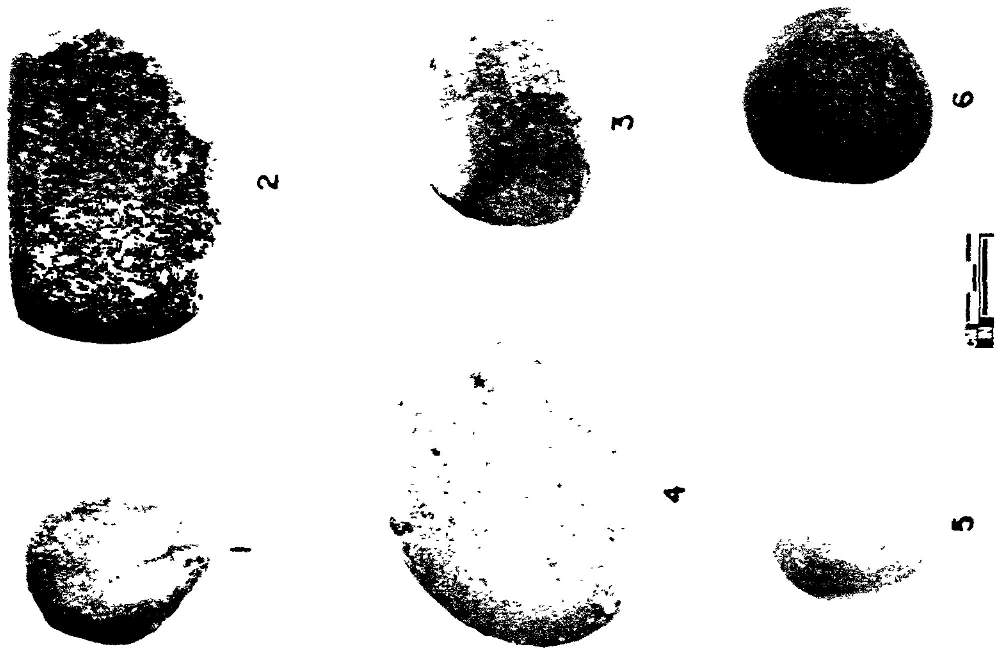
Pl. XLVII : *bangles. See p. 234*



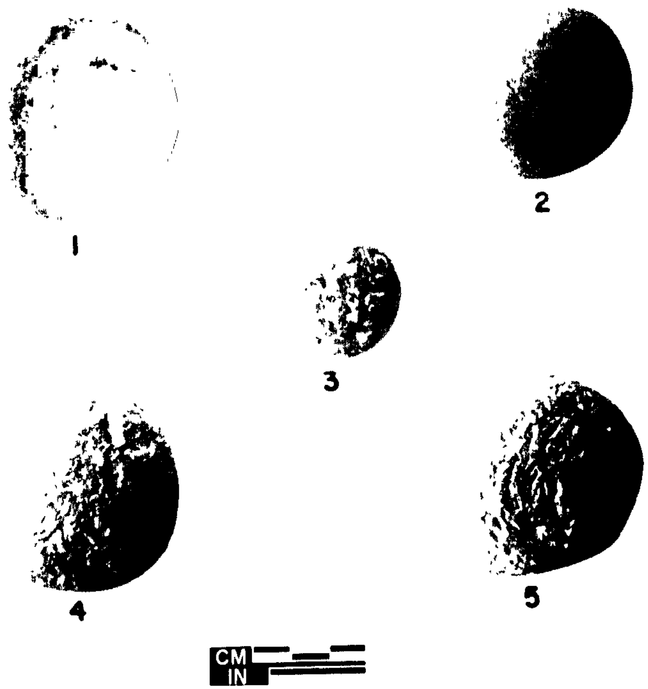
Pl. XLVIII : *bone and ivory objects. See p. 234*



Pl. XLIX : saddle querns. See p. 237



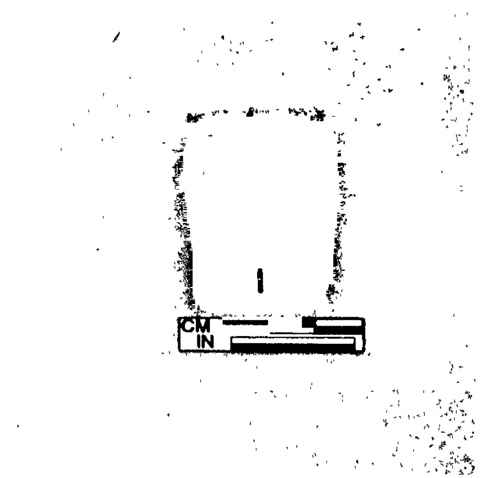
Pl. L : pestles and pounders. See p. 237



Pl. LI : *sling balls. See p. 237*



Pl. LII : *mace heads. See p. 237*



Pl. LIII : *stone square object. See p. 237*

BEADS

(PL. LIV; FIG. 63 AMD 63A)

In the Early Harappan levels, forty nine beads in all have been found from the excavations. The materials consist of steatite[1], gold[2], agate, carnelian, shell and terracotta.

fig. 63 and 63 A (pl. LIV)

1	2	3	4	5	6	7
Steatite	Terracotta	Agate	Carnelian	Shell	Gold	Total
40	5	1	1	1	3	52

1. Steatite 1, long barrel bead, decorated on one side with incisions. From a late level of Period I (KLB-1,Reg. No. 2848).
2. Agate, short, circular truncated bicone bead. From a middle level of Period I (KLB-1, Reg. No.17625).
3. Shell, short, circular bead. From a middle level of Period I (KLB-1, Reg. No. 6886).
4. Carnelian, long bicone, truncated, circular bead. From a middle level of Period I (KLB-1, Reg. No. 7543).
5. Terracotta, short bicone, circular bead. From a late level of Period I (KLB-1, Reg. No. 529).
6. Steatite, long cylindrical, circular bead. From a late level of Period I (KLB-1, Reg. No. 3952).
7. Shell, short irregular shaped bead. From a late level of Period I (KLB-1, Reg. No.6919).
8. Steatite, disc bead. From an early level of Period I (KLB-1, Reg. No. 6622).
9. Faience, long cylindrical circular bead. From a middle level of Period I (KLB-1, Reg. No. 17623).
10. Steatite, disc bead. From an early level of Period I (KLB-I, Reg. No. 6885).
11. Steatite, disc bead. From a late level of Period I (KLB-1, Reg. No. 5831).
12. Steatite, disc bead. From an early level of Period I (KLB-1, Reg. No. 6623).
13. Steatite, micro disc bead. From a middle level of Period I (KLB-1, Reg. No. 6592).
14. Steatite, disc, circular bead. From a late level of Period I (KLB-1, Reg. No. 6036)
15. Steatite, discular bead. From a late level of Period I (KLB-1, Reg. No. 5831).
16. Steatite, disc bead. From an early level of Period I (KLB-1, Reg. No. 6881).
17. Steatite, disc bead. From a late level of Period I (KLB-1, Reg. No. 6631).
18. Steatite, disc bead. From an early level of Period I (KLB-1, Reg. No. 6460).
19. Steatite, disc bead. From a middle level of Period I (KLB-1, Reg. No. 5983).

20(a) Steatite, disc bead (1). From an early level of Period I (KLB-1, Reg. No. 6881).

20(b) Steatite, micro-beads (35). From an early level of Period I (KLB-1, Reg. No. 6881).

21. Terracotta, short, bicone circular bead (KLB-1, Reg. No. 8130)

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1 In Rajasthan Steatite is reported from Ajmer, Alwar, Banswara, Bhilwara, Dungarpur, Jaipur, Jodhpur, Udaipur, Kishanagarh. The Early Harappans could have exploited this mineral available in the near-by areas

2 Gold beads dealt with under Metal objects

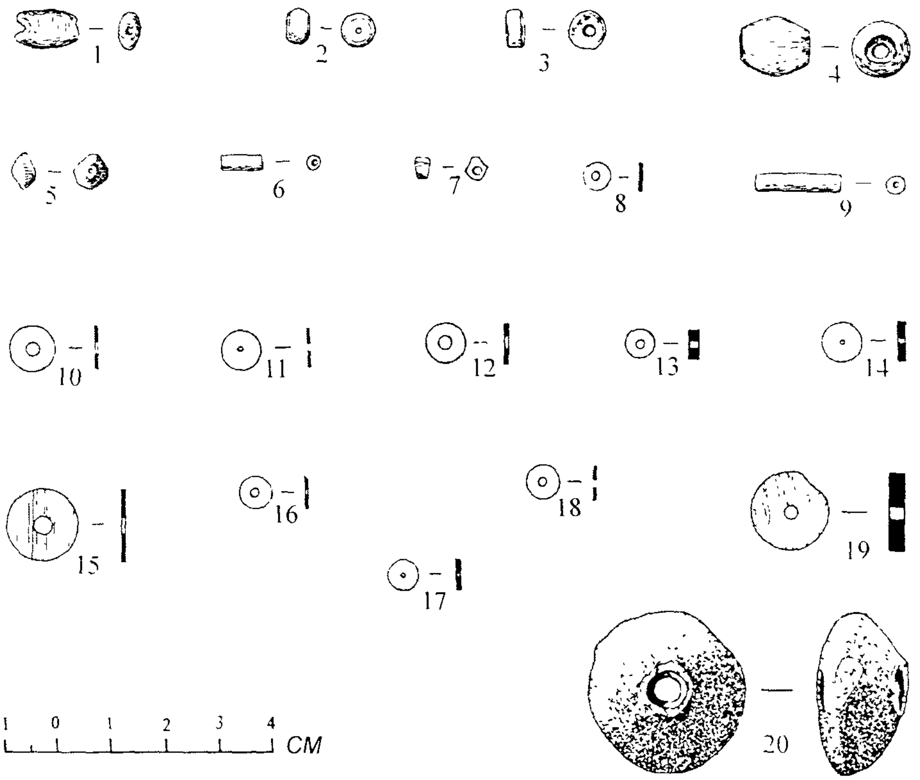
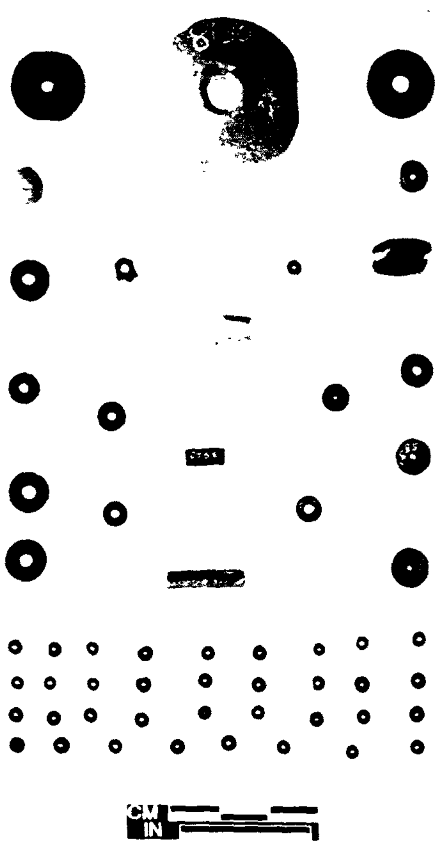


Fig. 63



Pl. LIV : *beads. See p. 241*

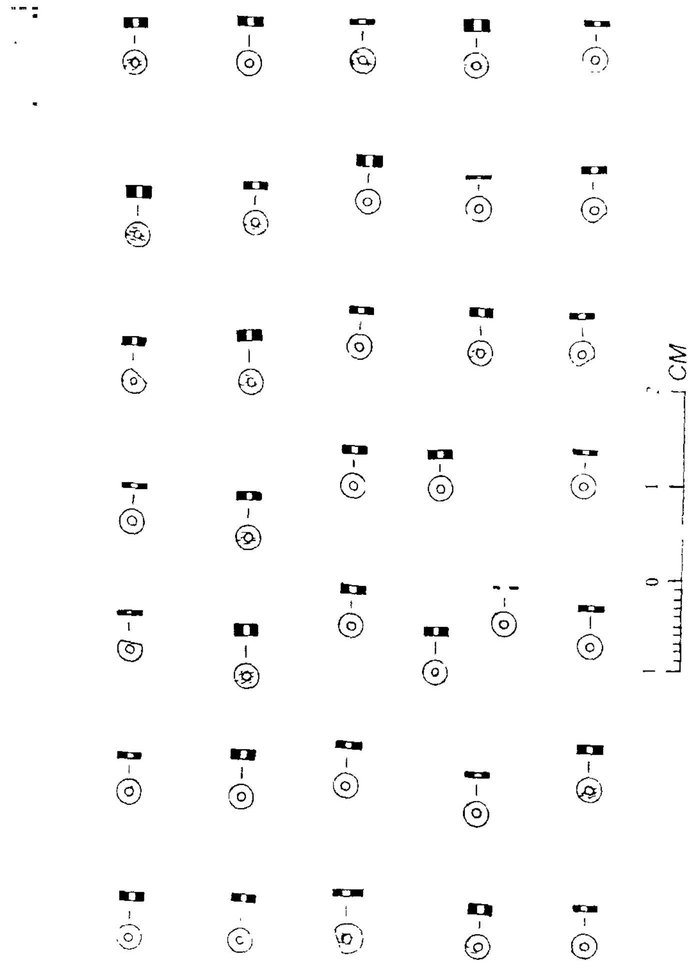


Fig. 63a

12

GRAFFITI

Madhu Bala

In the Early Harappan pottery a number of potsherds have mostly prefiring graffiti. Graffiti or potter's marks are available in Fabrics A, B, C and D. No sherds with graffiti was found in Fabric E and F. Graffiti on pottery are reported from Saraikhola, Jalilpur, Kotdiji, Amri and Rehman Dheri. It has been said by Lal that these could have a generic relationship with the Harappan writing[1].

(PL. LV, LVI) (FIG. 64)

1. Fragment of a dish of red ware of Fabric A having a graffiti mark on the outer wall showing arrow as filler, prefiring. From a late level of Period I.
2. Fragment of a vase of red ware of Fabric A having a graffiti on inner rim, showing two opposite triangles joining each other, post firing showing an oxidized core. From an early level of Period I.
3. Fragment of a small pot of red ware of Fabric A having graffiti on the base, showing intersecting lines, prefiring. From a late level of Period I.
4. Fragment of a shoulder portion of a jar of red ware of Fabric C, having graffiti on the outer wall, showing two filled-in triangles in opposite direction adjoining each other, prefiring. From an early level of Period I.
5. Fragment of a middle portion of a jar of red ware of Fabric A, having a graffiti on the outer wall showing horizontal lines emanating from a vertical line on both directions, prefiring. From an early level of Period I.
6. Fragment of an upper portion of a jar of red ware of Fabric C, having graffiti on the outer wall, showing two crosses within two vertical lines. From a mid-level of Period I.
7. Fragment of a middle portion of a jar of red ware of Fabric C, having graffiti showing a twig with branches and on side five vertical strokes, prefiring. From a late level of Period I.
8. Fragment of a middle portion of red ware of Fabric A, having graffiti on exterior, below the painted line, showing cross-like design, prefiring. From an early level of Period I.
9. Fragment of an upper portion of jar of red ware of Fabric A, having graffiti on the outer wall showing a cross with trident-like design on each end, postfiring. From a mid-level of Period I.
10. Fragment of a middle portion of a jar of red ware of Fabric C, having a graffiti on the outer wall, showing a *swatika*, prefiring. From a mid-level of Period I.
11. Fragment of a middle portion of a jar of red ware of Fabric C, having a graffiti on the outer wall, showing a cross within two vertical lines, prefiring. From a mid-level of Period I.
12. Fragment of a middle portion of a jar of red ware of Fabric B, having graffiti, showing an arrow as a filler and two continuous arrows on the opposite sides. From an early level of Period I.
13. Fragment of a bowl of red ware of Fabric C, having graffiti on the rim, making a design consisting of two triangles at the end of the horizontal lines, prefiring. From a late level of Period I.

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1 B B Lal, "Antecedents of signs used in Indus script a discussion", *South Asian Archaeology Studies*, (ed), Gregory L Possehl (Delhi 1992), pp 54, 56, F A Durrani 'Some Early Harappan sites in Gomal and Bannu Valley, *Frontiers of Indus Civilization* (eds), B B Lal and S P Gupta (Delhi 1984), pp 509-510, G L Possehl, *Indus Age* (Delhi, 1999), pp 710-11

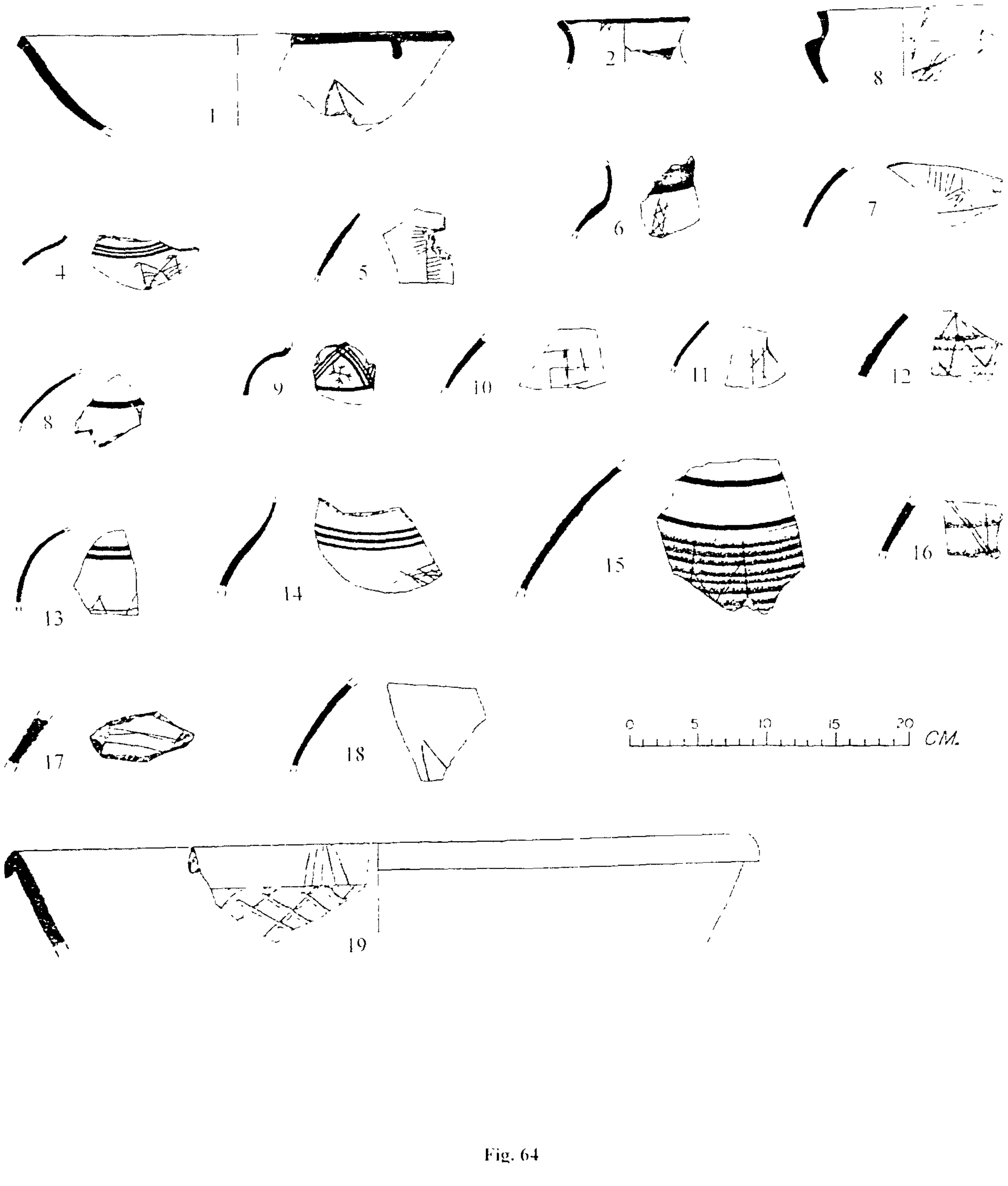
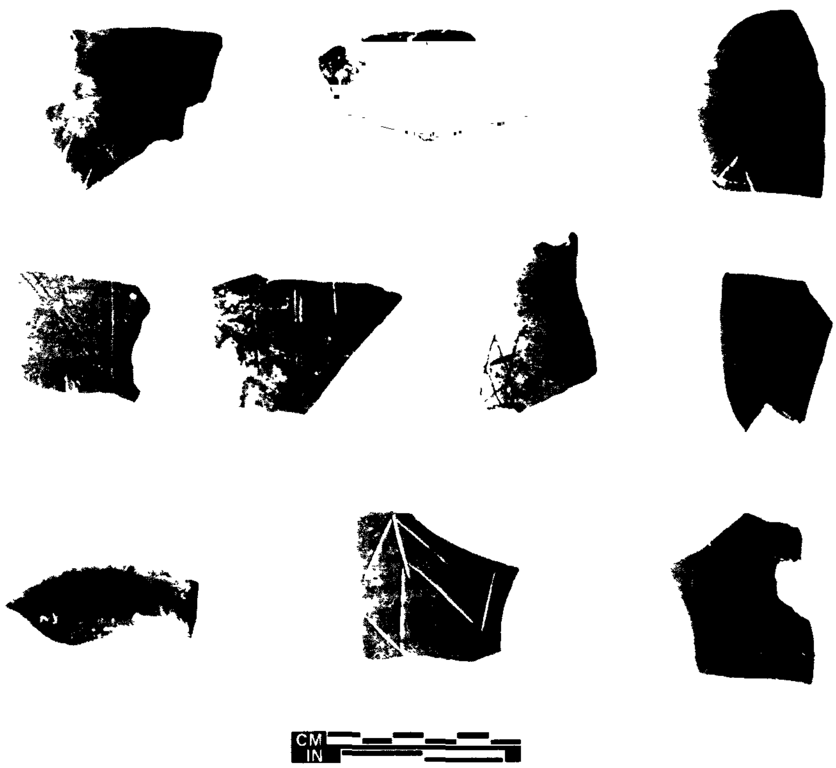


Fig. 64



Pl.LV : *graffiti. See p. 243*



Pl. LVI : *graffiti. See pp. 243-246*

14. Fragment of an upper part of a jar of red ware of Fabric C, having graffiti on exterior making a fish design. From a mid-level of Period I
15. Fragment of a jar of red ware of Fabric B, having graffiti on rusticated surface making a cross within two vertical lines, postfiring. From a mid-level of Period I.
16. Fragment of a middle portion of a jar of red ware of Fabric B, having graffiti on rusticated surface making V-like design, prefiring. From a mid-level of Period I.
17. Fragment of a jar of red ware of Fabric B, having graffiti on exterior making horizontal cross and line, prefiring. From a mid-level of Period I.
18. Fragment of a sherd of red ware of Fabric A, having graffiti making triangular design on exterior, pre-firing. From a late level of Period I.
19. Fragment of a trough of red ware of Fabric D, having graffiti on exterior of the rim, making five oblique lines, post-firing. From a mid-level of Period I.

13 TECHNICAL REPORTS

A. SCIENTIFIC ANALYSIS OF EARLY HARAPPAN POTTERY FROM KALIBANGAN

B.N. Tandon

Pottery in scientific parlance is called a synthetic material as clay is transformed in to an artificial body when baked in fire. This discovery could be traced back to pre-neolithic age. The main constituent of the pottery is clay, originating from disintegrated solid-rock or weathering caused by a variety of factors having plasticity and firing as its main characteristics and in most cases unaltered by early inhabitants as far as their compositional aspect is concerned. In few cases, another phenomenon occurs, in which the clay undergoes a number of stages in transportation, e.g. mixing with organic materials which change the nature of clay. Secondary clay is more plastic due to characteristic fine particles of clay. The secondary clay together with organic matter constitutes the active fraction of the soil with respect to most chemical and physical properties. This fraction has a particle size range below 2ú which is arbitrarily called clay. More stable clays have a chemical composition :

$SiO_2 \longrightarrow 46\%$

$Al_2O_3 \longrightarrow 40\%$

Its assumed hypothetical formula is : $Al_2O_3\ 2SiO_2\ 2H_2O$

It is from this clay that pottery is made. Several sherds were chosen to carry out the investigations of Early Harappan and Harappan pottery.

S. No. (1) (A) Early Harappan sherds - These are mainly red in colour while one piece is greyish. These are not of uniform type but differ from one another in thickness also.

No. of the sample	Thickness (minimum)	Thickness (maximum)	Colour
Fabric A	0.4 cm	1 cm	Red
Fabric B	0.4 cm	0.7 cm	Red
Fabric C	0.4 cm	0.8 cm	Red
Fabric D	0.9 cm	1.3 cm	Red buff
Fabric E	0.3 cm	1.1 cm	Yellowish red
Fabric F	0.6 cm	1.1 cm	Greyish

Sl. No.1A Early Harappan sherds :- These sherds were from Early Harappan levels. The colour of the pottery is mainly red while one of the sherds is greyish in colour. All these are not uniform in thickness and varies nearly to be double or less than triple. In wheel thrown pottery, particle tend to become oriented with the line axes lying horizontally while the wares made by other process, the particles are oriented - in vertically or in whorls. The ratio of the maximum/minimum of thickness is therefore of great importance from the technology point of view. The uniformity in the thickness indicates skillful working of the fabric.

In order to evaluate the characteristic and properties of the type of potteries, it was decided to determine the following physical parameters.

Sr. No.	Permeability in %	Density	Porosity in %
A	9%	2.15	23.5
B	8%	2.14	26.05
C	7%	2.17	24.7
D	6%	2.15	26.3
E	8%	2.18	26.6
F	6%	2.16	22.08

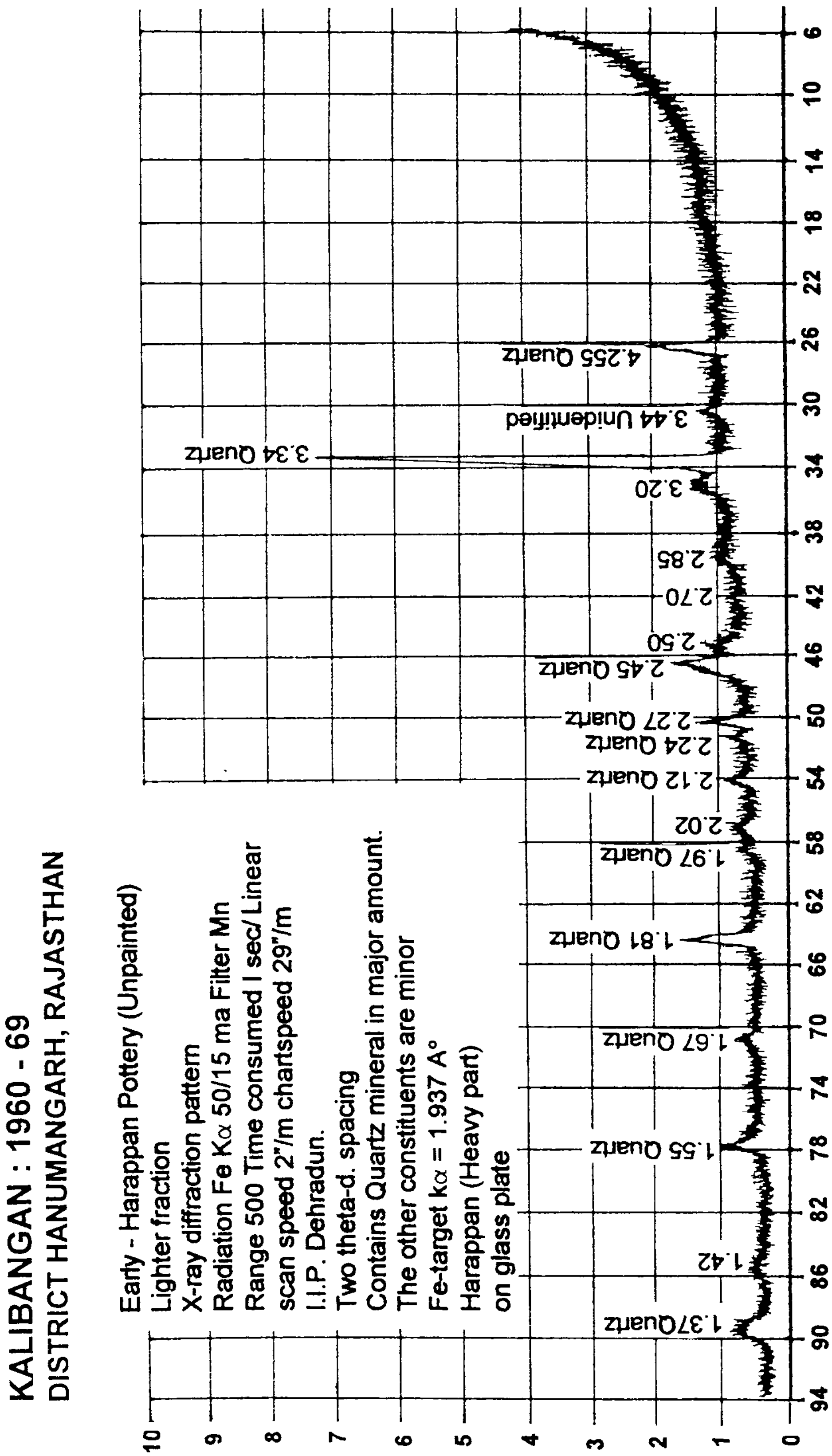

KALIBANGAN : 1960 - 69
DISTRICT HANUMANGARH, RAJASTHAN
Early - Harappan Pottery (Unpainted)
Lighter fraction
X-ray diffraction pattern
Radiation Fe Kα 50/15 ma Filter Mn
Range 500 Time consumed I sec/ Linear
scan speed 2"/m chartspeed 29"/m
I.I.P. Dehradun.
Two theta-d. spacing
Contains Quartz mineral in major amount.
The other constituents are minor
Fe-target kα = 1.937 A°
Harappan (Heavy part)
on glass plate
4.255 Quartz
3.44 Unidentified
3.34 Quartz
3.20
2.85
2.70
2.50
2.45 Quartz
2.27 Quartz
2.24 Quartz
2.12 Quartz
2.02
1.97 Quartz
1.81 Quartz
1.67 Quartz
1.55 Quartz
1.42
1.37Quartz
6
10
14
18
22
26
30
34
38
42
46
50
54
58
62
66
70
74
78
82
86
90
94
0
1
2
3
4
5
6
7
8
9
10

Fig. 65

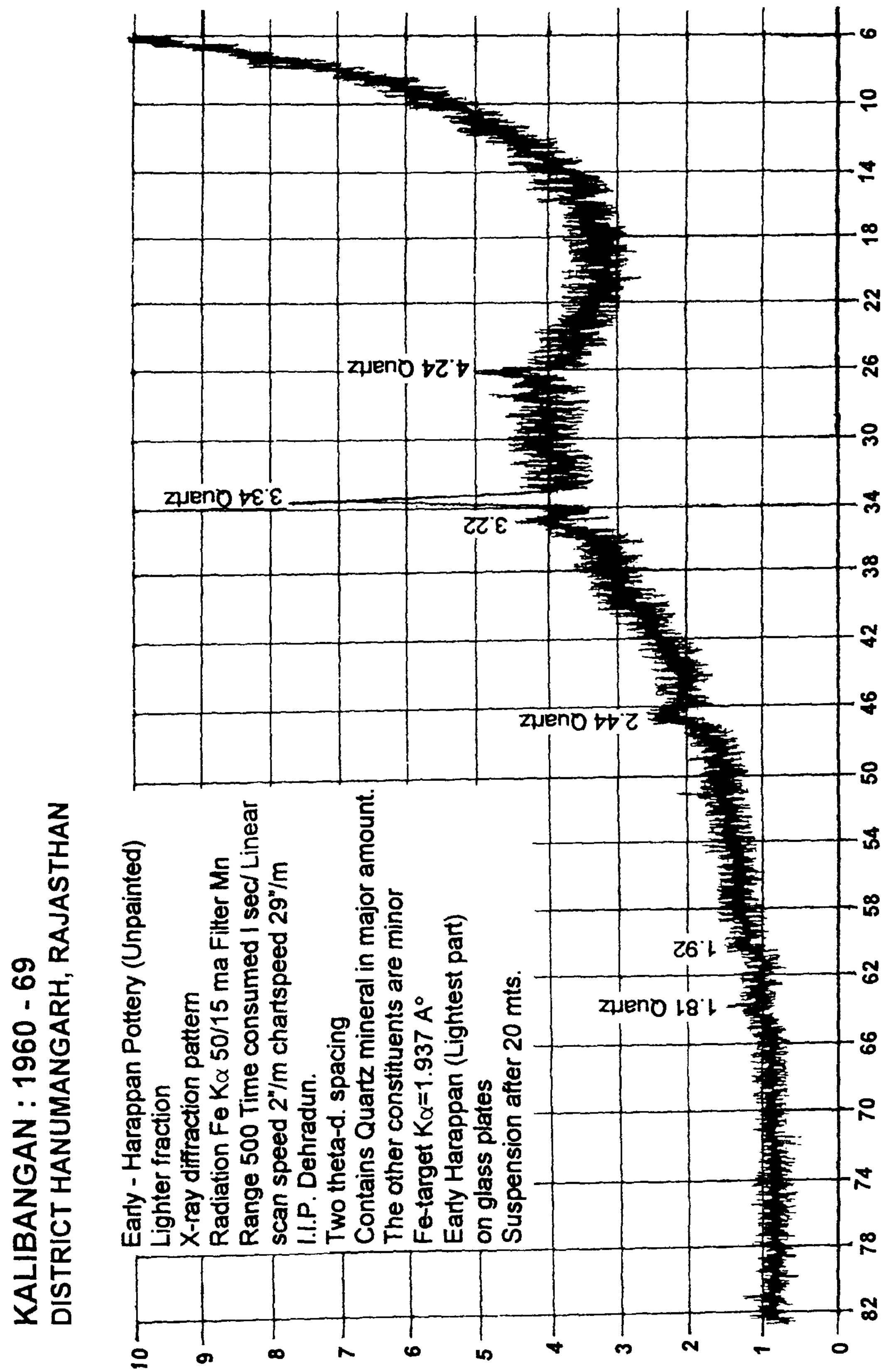

KALIBANGAN : 1960 - 69
DISTRICT HANUMANGARH, RAJASTHAN
Early - Harappan Pottery (Unpainted)
Lighter fraction
X-ray diffraction pattern
Radiation Fe Kα 50/15 ma Filter Mn
Range 500 Time consumed I sec/ Linear
scan speed 2°/m chartspeed 29"/m
I.I.P. Dehradun.
Two theta-d. spacing
Contains Quartz mineral in major amount.
The other constituents are minor
Fe-target Kα=1.937 A°
Early Harappan (Lightest part)
on glass plates
Suspension after 20 mts.
4.24 Quartz
3.34 Quartz
3.22
2.44 Quartz
1.92
1.81 Quartz
10
9
8
7
6
5
4
3
2
1
0
82
78
74
70
66
62
58
54
50
46
42
38
34
30
26
22
18
14
10
6

Fig. 66

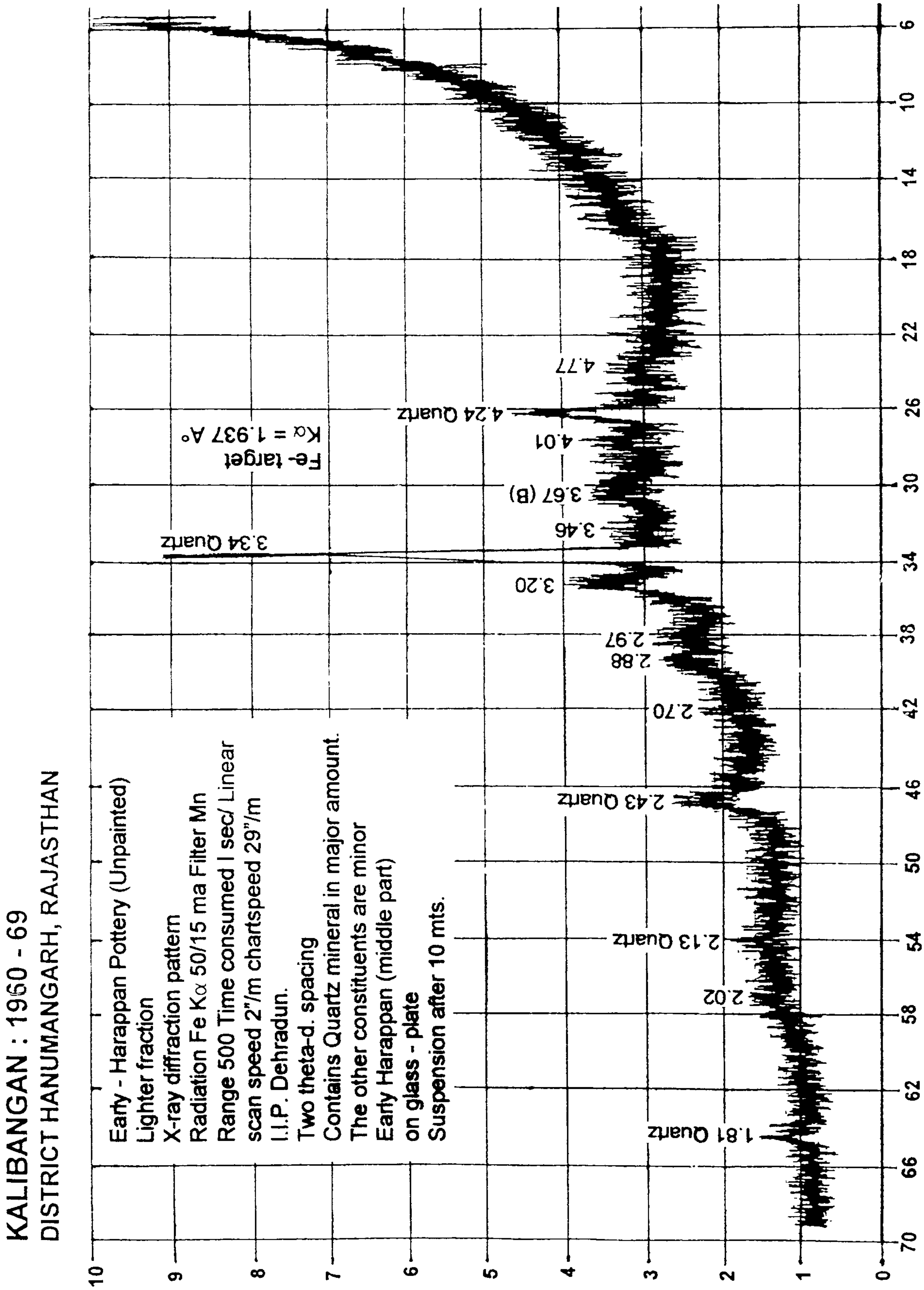

KALIBANGAN : 1960 - 69
DISTRICT HANUMANGARH, RAJASTHAN
Early - Harappan Pottery (Unpainted)
Lighter fraction
X-ray diffraction pattern
Radiation Fe Kα 50/15 ma Filter Mn
Range 500 Time consumed I sec/ Linear
scan speed 2°/m chartspeed 29"/m
I.I.P. Dehradun.
Two theta-d. spacing
Contains Quartz mineral in major amount.
The other constituents are minor
Early Harappan (middle part)
on glass - plate
Suspension after 10 mts.
Fe- target
Kα = 1.937 A°
3.34 Quartz
4.24 Quartz
4.77
4.01
3.67 (B)
3.46
3.20
2.97
2.88
2.70
2.43 Quartz
2.13 Quartz
2.02
1.81 Quartz
10
9
8
7
6
5
4
3
2
1
0
70
66
62
58
54
50
46
42
38
34
30
26
22
18
14
10
6

Fig 67

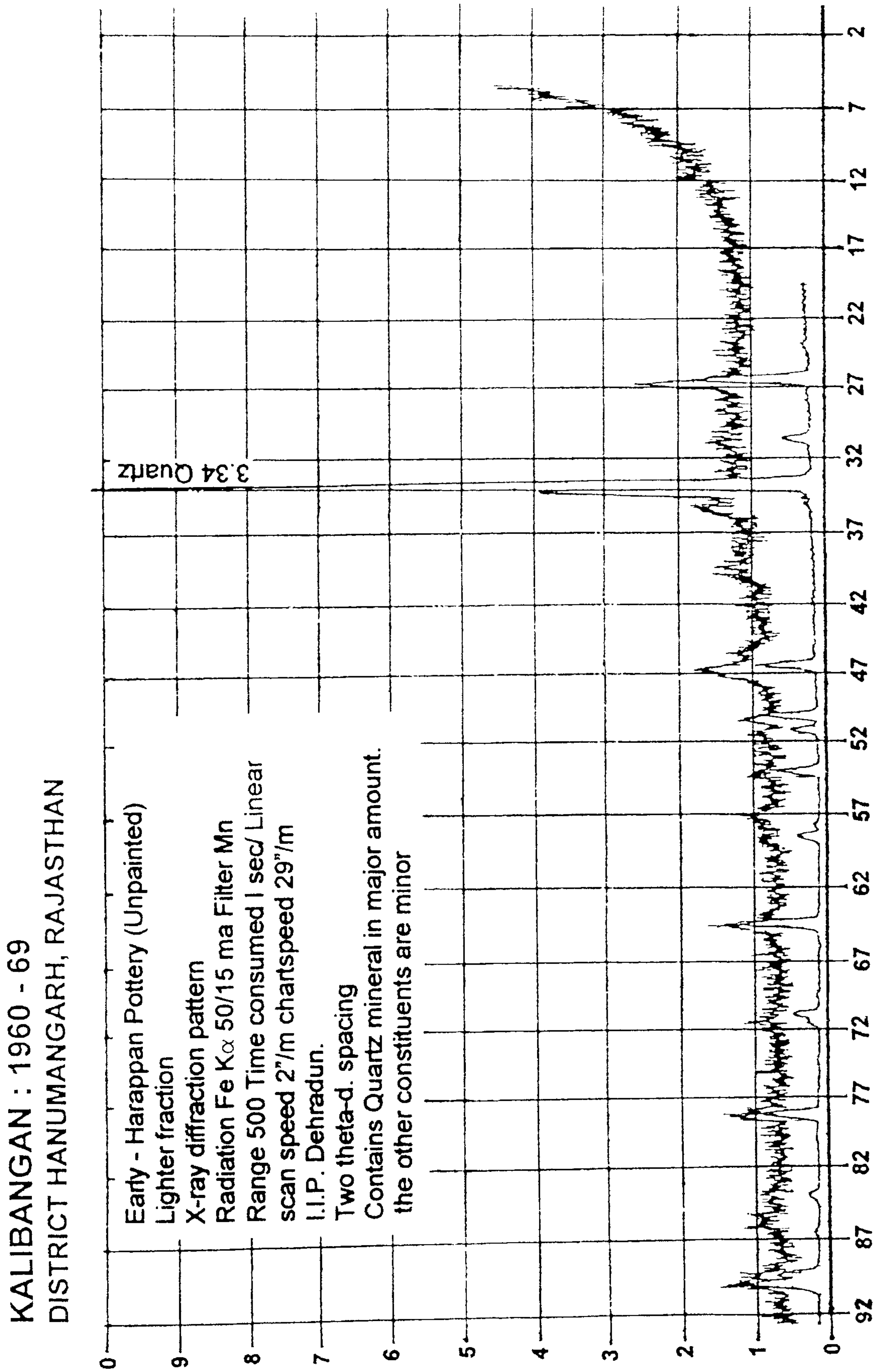

KALIBANGAN : 1960 - 69
DISTRICT HANUMANGARH, RAJASTHAN
Early - Harappan Pottery (Unpainted)
Lighter fraction
X-ray diffraction pattern
Radiation Fe Kα 50/15 ma Filter Mn
Range 500 Time consumed I sec/ Linear
scan speed 2"/m chartspeed 29"/m
I.I.P. Dehradun.
Two theta-d. spacing
Contains Quartz mineral in major amount.
the other constituents are minor
3.34 Quartz
10
9
8
7
6
5
4
3
2
1
0
92
87
82
77
72
67
62
57
52
47
42
37
32
27
22
17
12
7
2

Fig 68

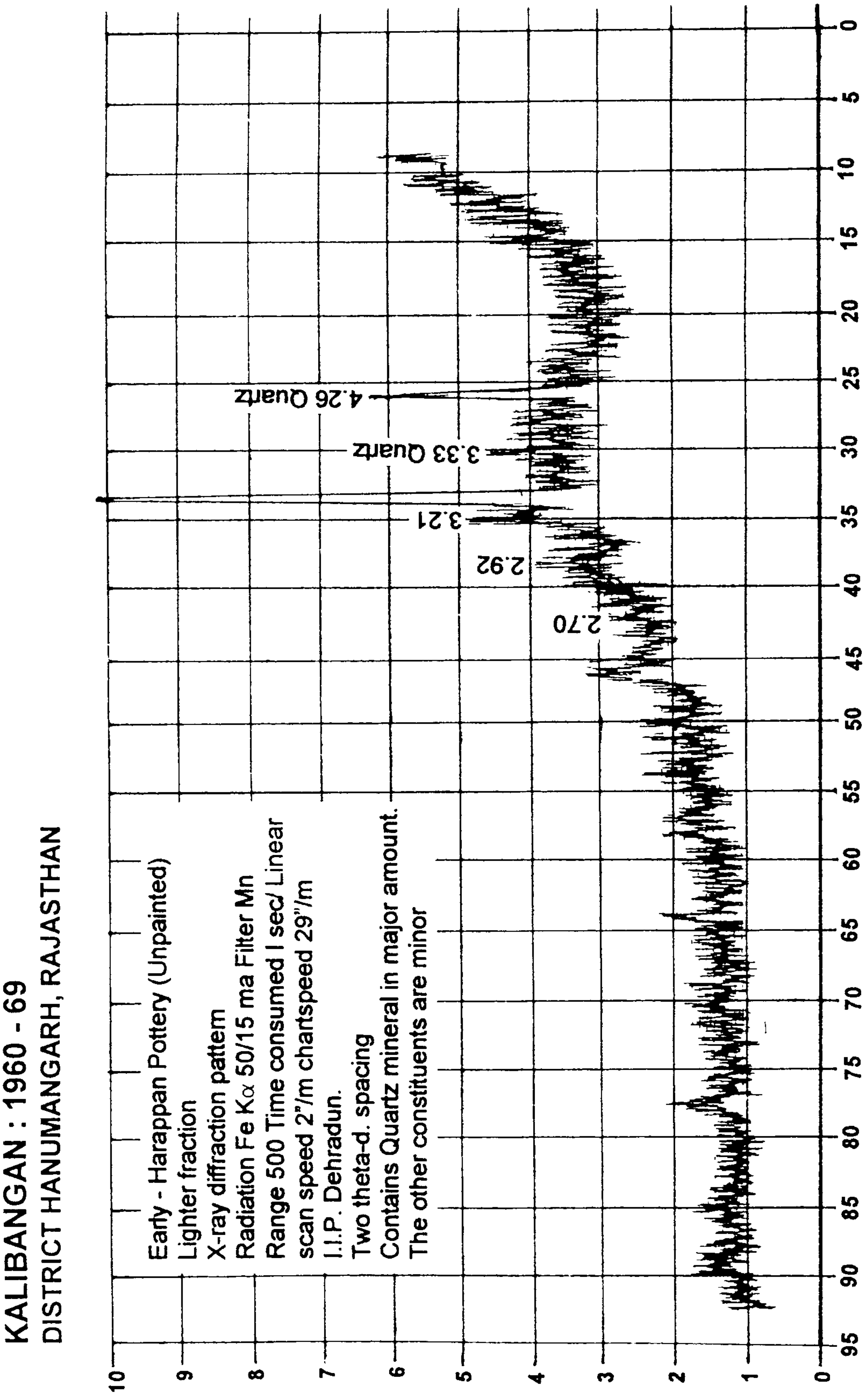

KALIBANGAN : 1960 - 69
DISTRICT HANUMANGARH, RAJASTHAN
Early - Harappan Pottery (Unpainted)
Lighter fraction
X-ray diffraction pattern
Radiation Fe Kα 50/15 ma Filter Mn
Range 500 Time consumed I sec/ Linear
scan speed 2°/m chartspeed 29"/m
I.I.P. Dehradun.
Two theta-d. spacing
Contains Quartz mineral in major amount.
The other constituents are minor
4.26 Quartz
3.33 Quartz
3.21
2.92
2.70
0
1
2
3
4
5
6
7
8
9
10
0
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
95

Fig 69

The above characteristics are an indication of the technique, source and firing range of the pottery. It is seen that the source of all the sherds is probably the same locality or area. The technique of fabrication and firing are quite similar. The hardness of the pottery is also quite close to one another and indicating presence of same minerals. A higher porosity and high permeability, as in the present case, point towards coarse particles utilized in the clay as non-plastic fillers to reduce shrinkage and cracking.

It was found essential to know the chemical composition of the pottery and therefore, these were subjected to chemical analysis with the following results.

[pl. LVII, LVIII, LIX]

Sr. No.	Sample No.	Moisture hygroscopic in%	L.OI	% SiO_2	% Al_2O_3	% Fe_2O_3	% CaO	%MgO	%Total
1	A	.33	1.17	60 2	20.6	10.4	4.04	2 03	98.77
2	B	.36	1.14	59.9	20.8	11.0	3.40	2.04	98 64
3	C	.43	1 12	61.8	19.10	10.89	3.68	2.26	98 56
4	D	38	1.03	63.08	20.8	7.85	4 03	2.04	99 22
5	E	.43	1.08	60.04	20.08	9.01	4.48	2.05	97.17
6	F	.40	0.96	59.8	22.74	8.40	4 02	2.57	98 17

The scrutiny of above data shows that all sherds from A to F probably belong to the same source material as hygroscopic and constitutional water are having more or less the same composition. The L O I data represents carbonaceous matter plus the total combined H_2O in sherds. The L O I gives us a valuable clue about the organic impurities which generally accompany the particles during course of transportation as in the present case is found to be very small in proportion, i.e. 0.96 to 1.12 % and also indicating incomplete oxidation. The presence of carbonaceous matter is of great interest. Clays in general of fluviatile origin form the alluvium found along the river course and on flood plain. They vary greatly in composition and usually carry a large quantity of organic matter especially vegetable many delta and Lacerstrin deposits are essentially similar in nature, thus it seems in the present case the transport of particle is very less. Silica as oxide present ranges from 59.8 to 63.08 % showing again quite good similarity about the provenance i.e. area or locality, silica is sometimes added to reduce shrinkage and plasticity on drying. Other ingredients present are Alumina^{+++}, Iron^{+++}, Calcium^{++}, Mg^{++}. Firing of such clays reduces tensile and crushing effect. Aluminumoxide ranges from 19.10 % to 22.74 %, thus making the clay quite plastic. Iron produces the colours ranging from 7.85 to 11 % while a clay with 1 to 3 % produces buff colours when fired and with 4 to 5 % of iron produces red colour after firing in O.C. Calcium is present to the tune of 3.4 to 4.48 % which imparts yellow colour on firing but due to the presence of iron the colour is masked. The pure clay contains

SiO_2 - 60%	most stable clay
Al_2O_3 - 30%	$SiO_2 \longrightarrow$ 46%
Fe_2O_3 - 7%	$Al_2O_3 \longrightarrow$ 40%
CaO - 2%	

a comparison of pure clay and clay of the pottery shows some resemblance in the chemical composition.

S.NO. (2) (B) HARAPPAN SHERDS

The colour of the potteries varies from red to buff and one of the sherds is perforated with different pore sizes as indicated in the table below. These differ in the thickness also. A similar procedure was followed as in case of early Harappan potteries. The unpainted perforated sherd is slightly yellowish than that of the painted pottery. In one of the sample a light black-streak was visible in the inner section of the sample of painted pottery. The thickness of these Harappan sherds is as following :-

1. THICKNESS

No. of the sample and description	Thickness (minimum)	Thickness (maximum)	Colour
(1) Unpainted	1 cm.	1.2 cm.	Red
(2) Unpainted	0.7 cm.	1.1 cm.	Red
(3) Unpainted	0.5 cm.	1 cm.	Red (perforated)

No. of the sample and description	Minimum thickness (cm.)	Maximum thickness (cm.)	Mean thickness	Colour
(1) Painted	1.07	1.16	1.115	Red
(2) Painted	0.83	1.14	0.985	Red
(3) Painted	0.61	0.78	0.695	Red

The thickness of the painted sherds is more than unpainted ones this painting was preferred in thick potteries probably to look smooth.

2. PHYSICAL PARAMETERS

No. and description	Porosity	Density
Painted (1)	27.81	2.53
Painted (2)	29.00	2.43
Painted (3)	24.54	2.32

The porosity and density of unpainted sample is lower then that of painted sample no change is detectable at RT/100°C in porosity.

3. DIAMETER OF THE HOLES

Sr. No.	From the side (cm.)	Convex	Concave side (cm.)
1	0.66	(1)	0.55
2	0.65	(2)	0.51
3	0.60	(3)	0.44
4	0.68	(4)	0.56
5	0.64	(5)	0.45
6	0.61	(6)	0.44
7	0.61	(7)	0.49
8	0.67	(8)	0.55
9	0.61	(9)	0.51
10	0.61	(10)	0.54

(4) These potteries were analysed to determine their chemical composition:-

(i) CHEMICAL ANALYSIS (% COMPOSITION)

No. & description	SiO_2	R_2O_3	Ca as Carbonate	Magnesium as $Mg_2P_2O_7$
Painted (1)	70.3	19.6	7.4	Nil
Painted (2)	71.3	19.8	7.29	Nil
			Fe_2O_3= 7.2	
			Al_2O_3= 12.6	
Unpainted (3)	67.2	22.1	8.4	Nil

(ii) Lattice water, Loss on ignition, Loss with (i.e Oxidation) HNO_3

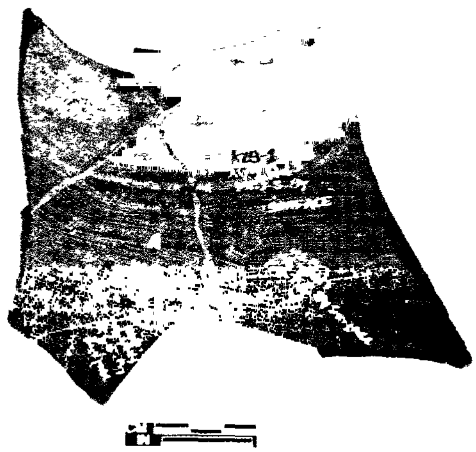
No. & description	Lattice water	Loss on ignition	Loss with HNO_3
1 Painted(1)	Nil	1.42	Nil
2 Painted (2)	0.87	Nil	Nil
3 Unpainted (3)	0.48	0.84	Nil

These results indicate that practically no hygroscopic material is present and the organic matter is almost negligible. All the compounds are in saturated oxidized state like Fe in Fe_3, Al in Al_3 form.

A look at tables 1 and 2 indicate that the hygroscopic moisture is negligible in these sherds along with any hygroscopic material in the clay. The presence of silica to the extent of 67.2 to 70.3 also focuses on the acidic nature of this source material which may also be due to its use as a filler in the pottery. The clay has been probably derived from Felspathic rock which is silica and silica rich silicates. The presence of R_2O_3 to this tune of 19.6 to 22.1 is quite important. High



Pl. LVII A : *Early Harappan pottery sample. See pp. 247-253*



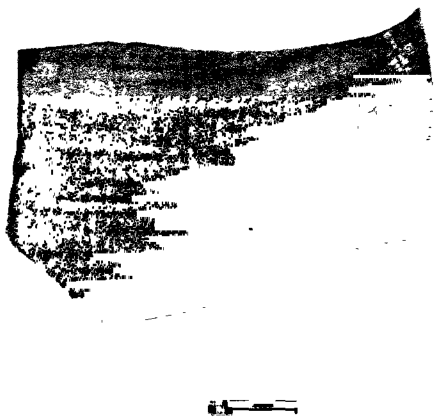
Pl. LVII B : *Early Harappan pottery sample. See pp. 247-253*



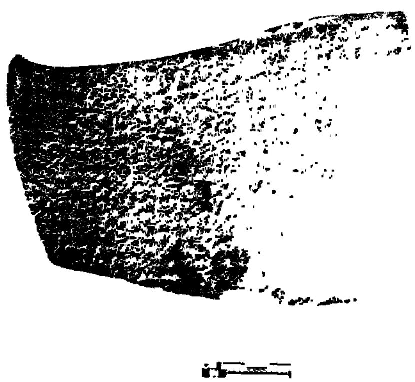
Pl. LVIII A : *Early Harappan pottery sample.*
See pp. 247-253



Pl. LVIII B : *Early Harappan pottery sample.*
See pp. 247-253



Pl. LIX A : *Early Harappan pottery sample.*
See pp. 247-253



Pl. LIX B : *Early Harappan pottery sample.*
See pp. 247-253

Alumina imparts higher plasticity while Fe_2O_3= 7.2 % will give the red colour on heating. The presence of calcium is due to carbonate or calcite. The chief effect of the calcium is to act as a flux or as a non-plastic filler and to produce mobile fluid liquid for bonding and facilitate drying. Magnesium is nil.

It is difficult to identify the exact variety of clay as they vary considerably in composition and their properties and there is no progressive relationship to geological age.

(5) PHYSICAL PROPERTIES OF THE BLACK-STREAK

Name and description	Loss at 110°C	Loss on ignition
Black streak	4.56	32.53

The black streak is composed of carbonaceous matter.

(6) RED SLIP ON THE POTTERY

Name and description	Loss at 110°C	Loss on ignition
Red Slip	Nil	Nil

No organic matter is present.

(7) CHEMICAL ANALYSIS OF THE RED SLIP

No. & description	SiO_2	FeO & Fe_2O_3	Al_2O_3	CaO	MgO	Total
Red slip	68.7	16.3	8.4	4.7	0.68	98.78

The red slip consists of siliceous material rich in iron-contents. The colour of upper portion of red slip is darker (more reddish) than the inner portion.

INTERPRETATION OF THE RESULTS OF HARAPPAN POTTERY

The diffractorgram were prepared with the help of I.I.P. Lab, Dehradun. Silica is very much interfering with other elements. After removal of silica, the diffractogram shows that in the unpainted pottery, the mineral is orthorhombic and silicate is in hypersthene form i.e. metasilicate of iron and Aluminium and with probably a formula of the type $R_2(Al_2Si)_2O_6$ where as R is Ca, Mg, Fe Fe_3. [Fig. 65,66,67,68,69]

These sherds are of yellowish red in colour. The unpainted pottery is more yellowish than that of painted ones. All the X-ray diffraction patterns (1 to 5) are similar in nature and taken from the different portion of the same Early Harappan pottery. To sum up, it has been found that the most important phase is α S_1O_2 (Silicon-di-Oxide) i.e. Quartz. The next phase is Fe(Mg, Fe) SiO_3 (Iron Magnesium Silicate) - (19-768) Hypersthene. The peaks are broad and diffused, iron carbide (3-400), may also be present. One line corresponding to 3.44 A° could not be identified. The density and porosity of unpainted pottery is lower than that of painted pottery. The loss on ignition and lattice water and loss with HNO_3 is almost negligible therefore it may be assumed that there is no hyqroscopic material e.g. organic substance and no change due to oxidation. Silica content is very high and calcium is more than 5%. The analysis of sample shows, Al is present to the tune of 12.6% as Al_2O_3 (may be acting as binder). Porosity change is not detectable at 100°C and R Temperature.

(8) TG/DTA CURVE OF POTTERIES :- [FIG. 70,71,72,73,74,75]

In all these potteries as indicated in the graph, slight inclination of T.G. line indicates small thermo-gravimetric-loss. The loss has been measured up to 950°C and it is found to be 1.5, 1.8, 1.6, 2.1, 2.3 % respectively for sample A,B,C,D,E, whereas D.T.A. lines give no peak on either side of the zero-line, showing no exothermic and endothermic peak thereby confirming no physical and chemical reaction occurs during heating up to 980°C. Inclination of DTA line is due to fixation of slope T2.

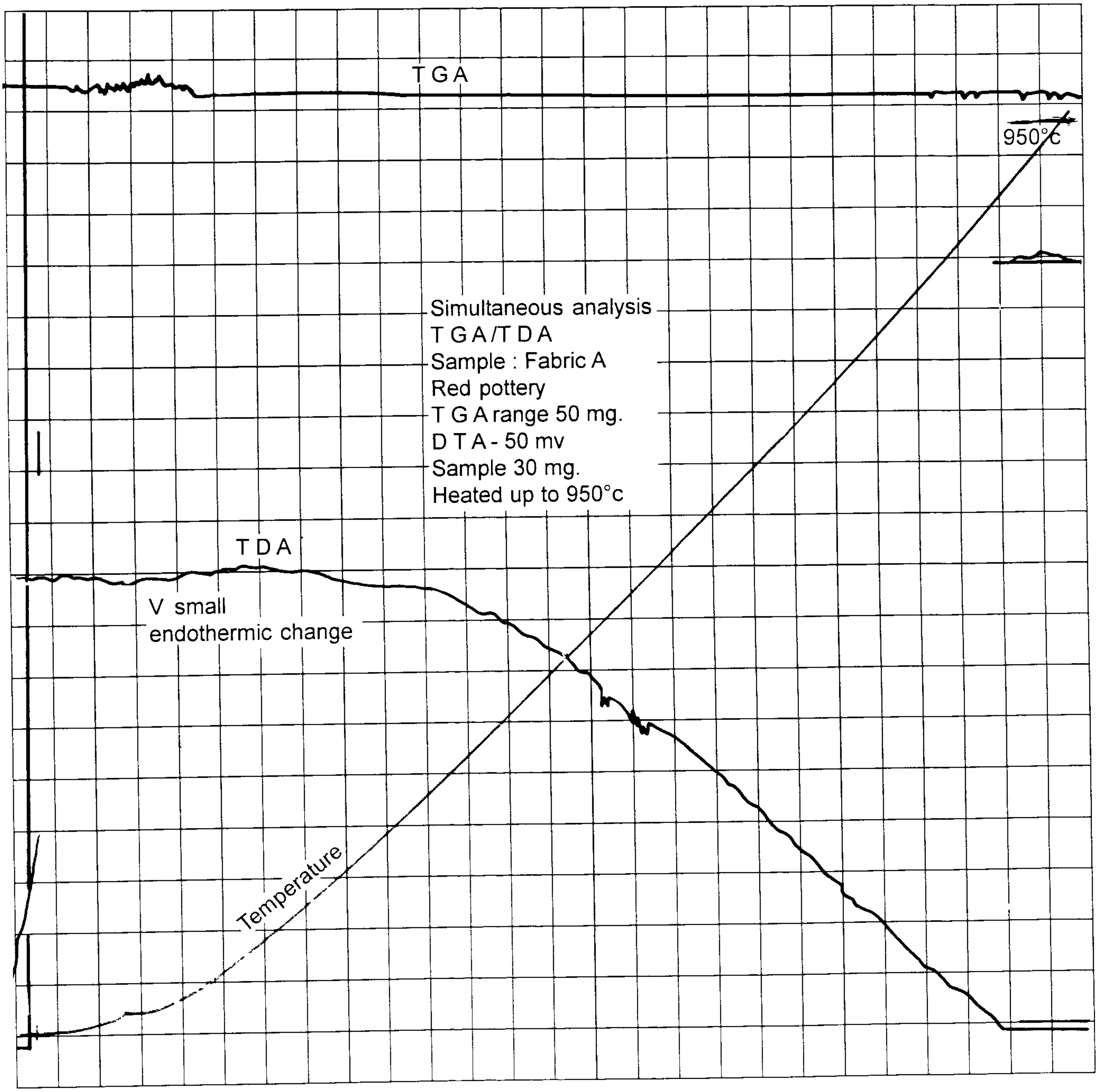

T G A
950°c
Simultaneous analysis
T G A/T D A
Sample : Fabric A
Red pottery
T G A range 50 mg.
D T A - 50 mv
Sample 30 mg.
Heated up to 950°c
T D A
V small
endothermic change
Temperature

Fig. 70

KALIBANGAN : 1960 - 69
DISTRICT HANUMANGARH, RAJASTHAN

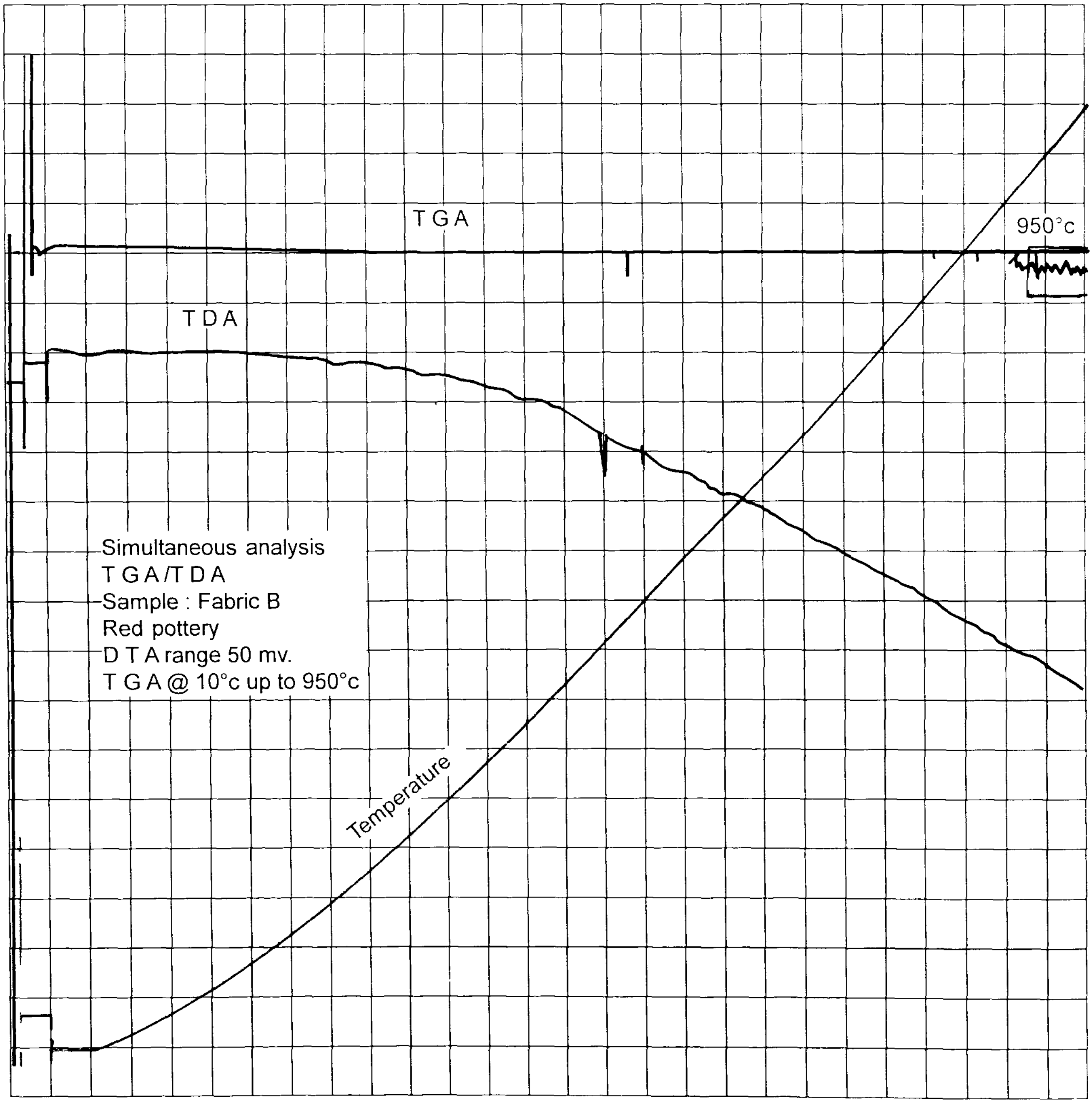


Fig. 71

KALIBANGAN : 1960 - 69
DISTRICT HANUMANGARH, RAJASTHAN

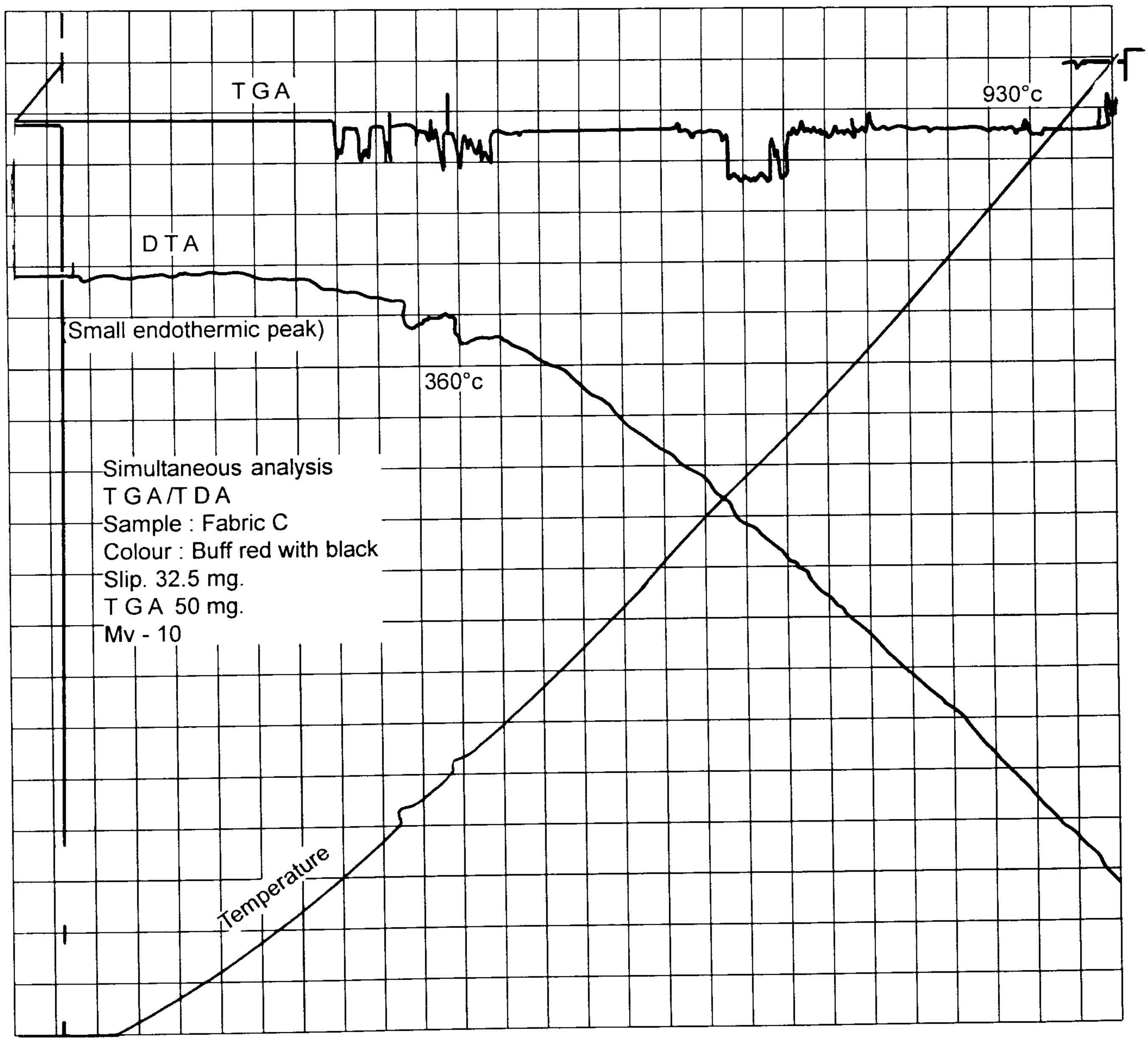


Fig. 72

KALIBANGAN : 1960 - 69
DISTRICT HANUMANGARH, RAJASTHAN

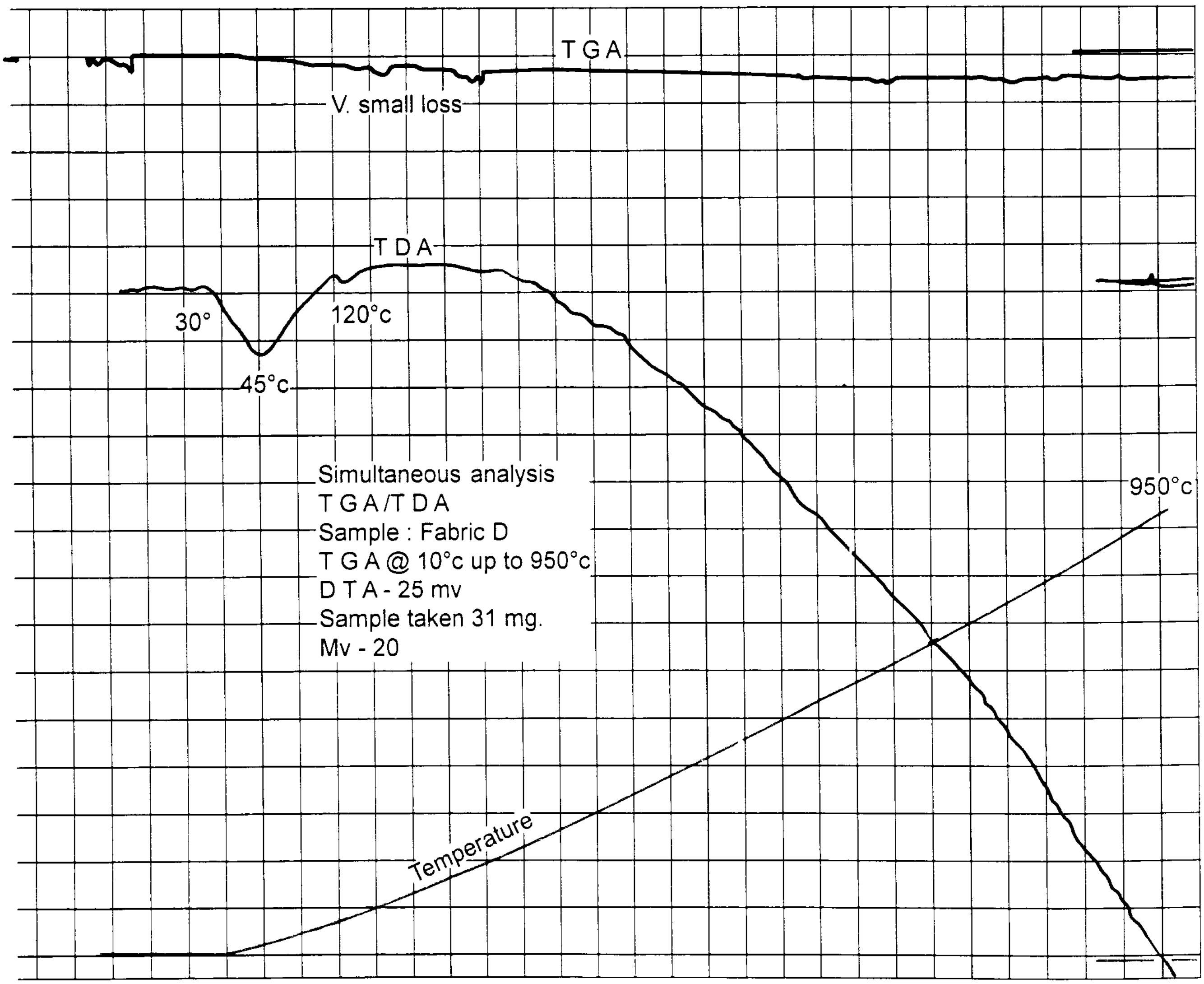


Fig. 73

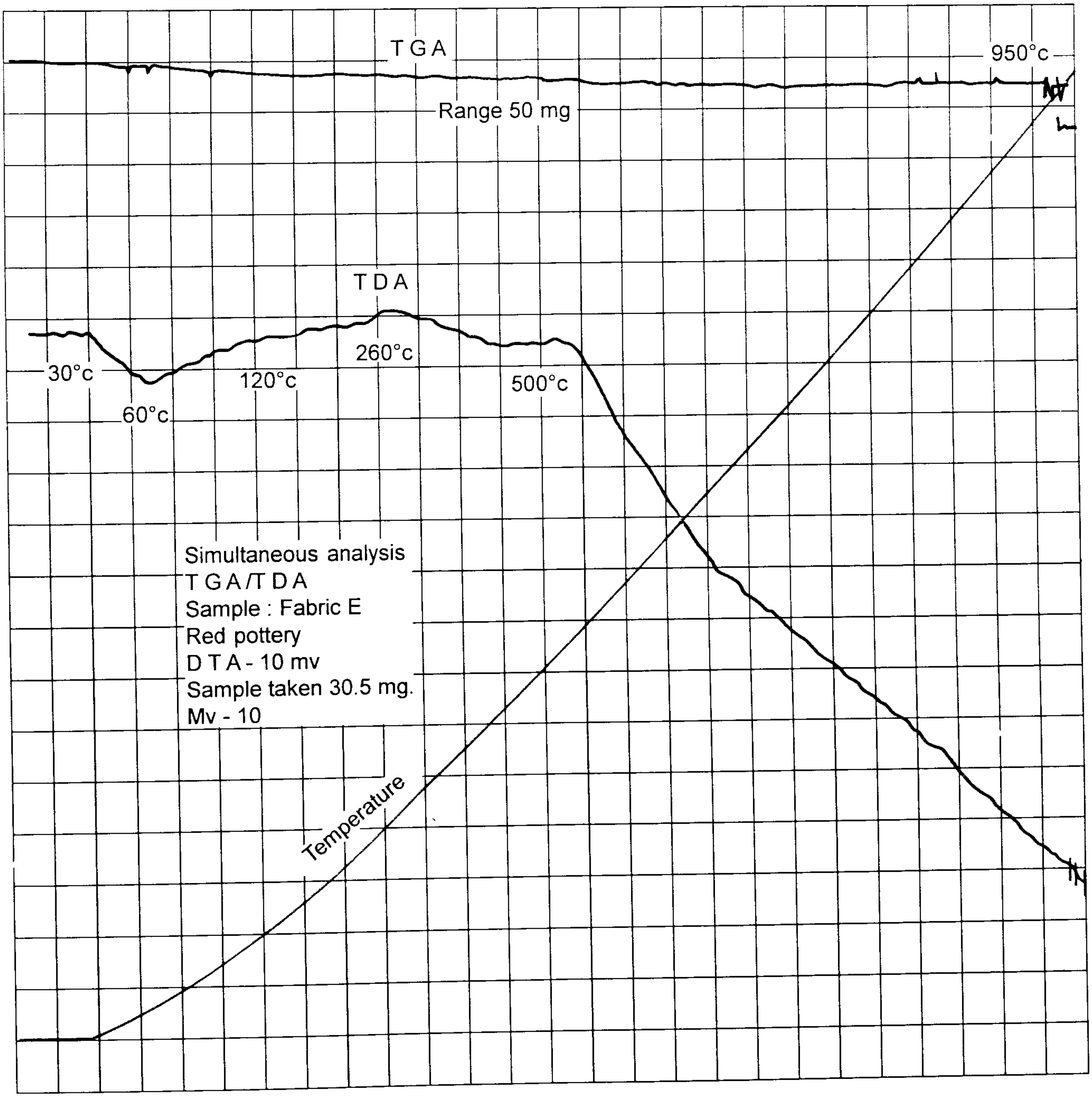

T G A
950°c
Range 50 mg
T D A
260°c
30°c
120°c
500°c
60°c
Simultaneous analysis
T G A/T D A
Sample : Fabric E
Red pottery
D T A - 10 mv
Sample taken 30.5 mg.
Mv - 10
Temperature

Fig. 74

KALIBANGAN : 1960 - 69
DISTRICT HANUMANGARH, RAJASTHAN

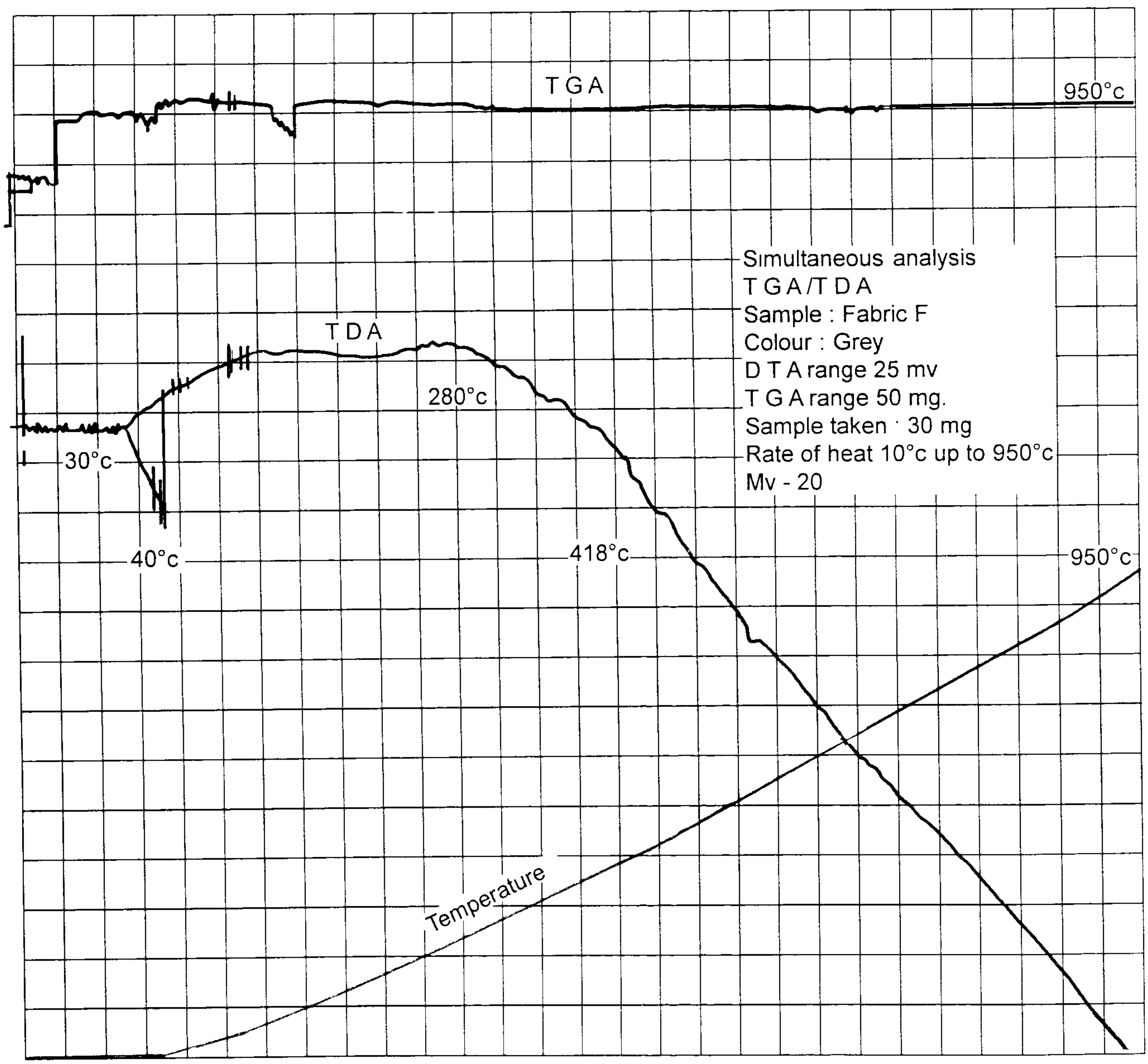
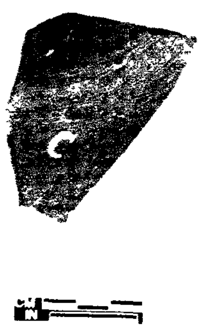


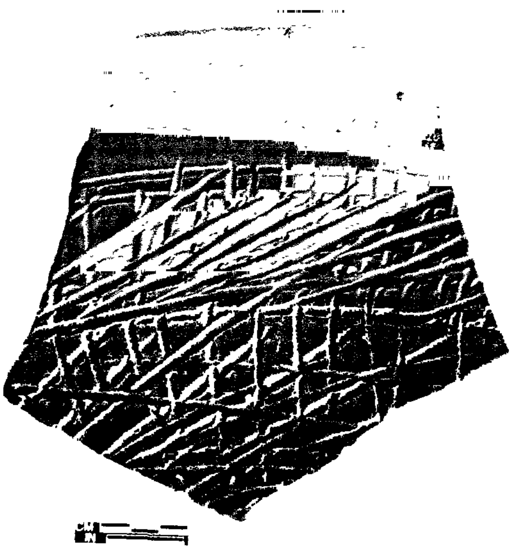
Fig. 75



Pl. LX A : *Early Harappan pottery sample. See pp. 247-253*



Pl. LX B : *Early Harappan pottery sample. See pp. 247-253*



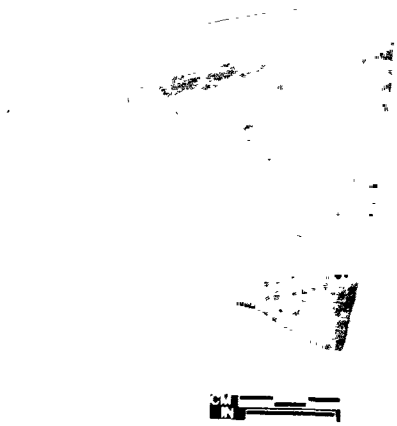
Pl. LXI A : *Early Harappan pottery sample. See pp. 247-253*



Pl. LXI B : *Early Harappan pottery sample. See pp. 247-253*



Pl. LXII A : *Early Harappan pottery sample. See pp. 247-253*



Pl. LXII B : *Early Harappan pottery sample. See pp. 247-253*

(9) STUDY OF TG/DTA OF GREY POTTERY:- [FIG. 70,71,72,73,74,75]

The inclination of TG line shown in the graph by the Grey pottery sherd is slight indicating small thermal loss which is 2.5% - whereas the DTA gives broad exothermic peak starting from 50^{0}C and continues up to 418^{0}C giving maxima at 280^{0}C, thus indicating that the probable firing range for the pottery must be above 400-600^{0}C. The colour which has developed is dark, grey may be the result of unoxidized firing for a short duration. Turning of grey colour of this pottery to red clear indication that iron is present in reduced state, heating to 700^0-750^0 bring from oxide into feric state i.e. red.

CONCLUSION

Marked differences have been noted in the characteristics (both physical and chemical) in the Early-Harappan and Harappan sherds from Kalibangan excavations. These are as below:-

EARLY HARAPPAN POTTERY

1. These are crude form of sherds which are having minimum and maximum thickness, ratio varying from 1:2 to 1:4 and no uniformity in body fabric is seen.
2. Porosity in early Harappan pottery varies from 22 to 26 %.
3. Silica contents is about 50 to 63.8% in the sherds indicating that the clay has been taken from one source since other ingredients also indicate the same pattern.
4. The firing temperature of these early Harappan pottery is about 400 to 600^{0}C i.e. low fired pottery.
5. Fabrication technique is quite complex. It is coil made and crude technically indicating amateurish characteristics. In the pottery manufacture both hand made and slow wheel techniques is available. The inner side in one case displays successive layered structure without rotative movement.

HARAPPAN POTTERY

1. In this case the body is fairly uniform in the thickness.
2. While in these cases it varies from 25 to 29% i.e. more than the early Harappan.
3. Silica content is higher by nearly 8 to 10% in this case i.e. 67.2 to 71% and these have also been taken probably from the same locality. The higher of silica indicate lowering of shrinkage and cracks.
4. It is fired at a higher temperature i.e. more than 930^{0}C.
5. It is noted that in all the cases it is wheel thrown and shows better techniques with craftsmanship and is probably energised or rotative action.

ACKNOWLEDGMENT

My grateful thanks are due to Sarvashri P.K. Nagta and Mridul Pande, Chemical Assistants for their valuable assistance in the analysis of the material.

It is interesting to note that in the late Harappan Red Ware pottery from Bhagwanpura the Silica content ranges from 55.20% to 66% calcium is present up 3.6% Magnesium oxide is present i.e. 2.34%. It has muscovite and quartz in addition. Porosity is 17%. The firing has been done beyond 900^{0}C

[1] B.N. Tandon 'Scientific Investigation of Pottery' in Jagat Pati Joshi, *Excavations at Bhagwanpura 1975-76 and other Explorations and Excavations 1975-81 in Haryana, Jammu & Kashmir and Punjab* (New Delhi 1993) p. 215

B. REPORT ON METAL SPECIMENS FROM KALIBANGAN

Dr. B.B. Lal

A number of metallic objects from Kalibangan were received in this laboratory for chemical treatment and preservation. Suitable specimens were taken from some of these antiquities for chemical analysis with a view to determining the composition of the metals and alloys used in their manufacture. These antiquities comprised, chisels, spear heads, celts, needles pins, rods, rings, arrow heads, etc. In view of this wide variety, it was of interest to study the metallurgy of the period. However, all these antiquities were sent to this laboratory without indicating dates, absolute or relative, or the stratigraphical horizons from which they came. The data obtained by chemical analysis cannot thus be usefully employed in the study of development and decadence of metallurgy and metal working at Kalibangan in the absence of relative stratigraphical dates, the only point of interest was to determine whether copper and its alloys of different compositions were employed and whether the impurities present therein had any significance[1]. All these specimens were highly corroded and mineralised, and generally, a solid metallic core was absent. The specimens were, therefore, carefully drawn from the antiquities after elimination of corrosion products. The results of chemical analysis of 19 specimens selected at random and representing a general cross-section of the metallic artefacts are shown 'm the enclosed table (p.266).

From the analytical data it is noticed that most of the objects were made of copper containing only small amounts of iron and lead. Tin is present to the extent of 3.85% and 2.37% in two specimens only; it is also present to the extent of 1.80%9 1.65% and 1.32% in three other specimens, The remaining specimens generally contain traces of tin. Lead has been detected in most of the specimens; only two specimen were found to be free from lead. Similarly, a small amount of iron was present in all the specimens excepting one. Zinc is absent and it has been found in traces in specimens, whereas only one specimen shows zinc, to the extent of 3.40%.

Antimony and arsenic were found to be absent, but seven specimens showed traces of nickel. The above results show that copper containing small amounts of lead, iron and tin as impurities was used for making various types of metallic artefacts. The small amounts of tin in three or four specimens do not appear to be intentional additions, for the proportion of tin is not high enough to produce bronze. Similarly, there is no evidence for the employment of brass at Kalibangan, for only one specimen has shown 3.40% of zinc which could not produce an alloy corresponding to brass.

---

1 The stratigraphical details have been now added in the chart The copper is arsenic free which is quite significant (J P Joshi)

KALIBANGAN METAL OBJECTS

Sr. No.	Specimen No.	Stragiphical Position	Description	SiO2	Cu	Sn	Pb	Fe	Zn	Ni	Undetermined Oxygen by Diff.
				Analysis							
1 KLB-1	2387	Late level of Early Harappa	Copper arrow head	-	83.51	0.22	2.48	2.92	-	tr	10.87
2 KLB-1	8249	Late level of Mature Harappa	Copper piece	-	63.69	2.37	2.34	3.64	-	-	27.96
3 KLB-1	8373	Middle level of Mature Harappa	Copper piece	5.57	56.68	-	0.4	8.5	-	-	28.85
4 KLB-2	683	Late level of Mature Harappa	Copper object	-	95.18	0.2	1.63	2.68	tr	tr	0.31
5 KLB-2	1980	Middle level of Mature Harappa	Copper ring	-	98.97	-	-	1.04	-	-	-
6 KLB-2	8692	Middle level of Mature Harappa	Copper rod	-	82.26	0.32	2.06	4.14	-	tr	11.22
7 KLB-2	2857	Late level of Mature Harappa	Copper piece	3.4	37.16	1.65	2.07	2.6	-	-	53.12
8 KLB-2	4649	Late level of Mature Harappa	Copper piece	-	96.18	1 46	1.27	1.94	-	tr	-
9 KLB-2	4778	Late level of Early Harappa	Copper antimony rod	7.75	75.75	0.68	1.56	1.2	tr	nil	13.06
10 KLB-2	4852	Middle level of Mature Harappa	Copper antimony rod	10.29	73.62	3.85	0.67	1.37	tr	nil	10 2
11 KLB-2	8502	Late level of Mature Harappa	Copper plate (broken)	9.4	30.05	0 59	1.75	1.38	-	-	56 83
12 KLB-2	8600	Late level of Mature Harappa	Copper object	-	99.26	-	-	-	-	-	0.74
13 KLB-2	16948	Late level of Mature Harappa	Copper bar, celt or chisel	1.24	85	6.08	1.5	2.57	tr	tr	3.61
14 KLB-1	17575	Early level of Mature Harappa	Copper spear head	4.6	53.62	1.8	3.47	1.68	tr	-	34 83
15 KLB-2	15294	Late level of Mature Harappa	Copper long spear head	4.72	53.37	0.17	2.05	0.22	3 4	tr	36.07
16 KLB-2	16930	Late level of Mature Harappa	Copper chisel	-	93.53	-	2.46	2.33	tr	tr	1.68
17 KLB-1	15228	Late level of Mature Harappa	Copper chisel	0.94	97.52	-	1.27	0.65	-	-	-
18 KLB-2	15294	Late level of Mature Harappa	Copper needle	2	94 27	-	1.37	1.38	-	-	0 98
19 KLB-2	14983	Late level of Mature Harappa	Copper celt	0.39	96.86	-	0.54	1.64	-	-	0.57

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C. IDENTIFICATION REPORT[1] OF ANIMAL REMAINS FROM KALIBANGAN, RAJASTHAN

S. Banerjee, R.N. Mukherjee and partially by B. Nath

Phylum MOLLUSCA
Class BIVALVIA
Order EULAMELLIBRANCHIATA
Family UNIONIDAE
Lamellidens marqinalis Lamarck

(KLB-1, YC-2 Qd-4)
Broken half shell. From a late level of Period II (KLB-1, YC-2, Qd-4).
Parreysia corrugate Miller

Shell. From a late level of Period II (KLB-2, XA-17, Qd-4)
Phylum CHORDATA
Class PISCES
Order TELEOSTEI
Teleostei fish

Body of vertebra. From a late level of Period II (KLB-1, YA-1, Qd-4).
Fragment of vertebra-4. From an early level of Period I (KLB-1, YF-2, Qd-3)
Fragment of vertebra. From an early level of Period II (KLB-2, E1).

Class REPTILIA
Order CHELONIA
Family EMYDIDAE
Kachuqa tectum Gray
Fragment of hypoplastron. From an early level of Period II (KLB-2, XA-9).
Fragment of hypoplastron. From an early level of Period II (KLB-2, XA-3, Qd-3).
Fragment of hypoplastron. From an early level of Period II ((KLB-2, XA-9).

Family TESTUDINIDAE
Bataqura baska Gray
Fragment of hypoplastron. From a late level of Period II (KLB-1, B-5, Qds-1).
KLB-1, locus-B-5 Qd-1, stratum-(3), depth-0.47 m. date-27.2.63
Fragment of hypoplastron. From a late level of Period II.

Family TRIONYCHIDAE
Chitra indica Gray
KLB-1, locus-B-5 Qdt-1, stratum-3, depth-0.70 m.
Fragment of hypoplastron. From a late level of Period II.

KLB-1, locus-D-1 Qd-4, stratum-4, depth-4.4 m.
Fragment of hypoplastron. From a middle level of Period I.

KLB-2, locus-ZE-1, stratum-4 W, date 5.2.62.
Fragment of hypoplastron. From a late level of Period II.

KLB-2, locus-ZE-1, stratum-3 W, date 22.2.62.
Fragment of hypoplastron. From a late level of Period II.

KLB-2, locus-E 1 Qdt-1, stratum-28.
Fragment of hypoplastron-2. From an early level of Period II.

KLB-2, locus-E 1 Qdt-1, stratum-29, depth-7.60 cm.
Fragment of hypoplastron-6. From an early level of Period II.

KLB-2, locus-E 1 Qdt-1, stratum-20.
Fragment of hypoplastron-2. From an early level of Period II.

KLB-2, locus-XA-6, road-2, depth-85 cm.
Fragment of hypoplastron. From a late level of Period II.
KLB-2, locus-XA-6, road-4, depth-1.12 m.
Fragment of hypoplastron. From a late level of Period II.

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[1] Jagat Pati Joshi, Summary of Results, p 17

KLB-2, locus-XA-6, road-4, stratum-12, depth-3.69 m.
Fragment of hypoplastron. From a middle level of Period II.

KLB-2, locus-XA-7, Qd-4, stratum-8, depth-1.45 m., date 3.3.63.
Fragment of hypoplastron-10. From a middle level of Period II.

KLB-2, locus-XA-8, S.E. Sector, stratum-7.
Fragment of hypoplastron. From a middle level of Period II.

KLB-2, locus-XA-8, S.E. Sector, stratum-25, depth-4.40 m., date 2.1.63.
Fragment of hypoplastron. From an early level of Period II.

KLB-2, locus-XA-8, S.E. Sector, stratum-23, date 15.12.62.
Fragment of hypoplastron-2. From an early level of Period II.

KLB-2, locus-XC-9, Qdt-4, stratum-2, depth-0.55 m., date 6.2.63.
Fragment of hypoplastron-9. From a late level of Period II.

KLB-2, locus-D-9, Qd-3, stratum-2, depth-0.55 cm., date 18.1.63.
Fragment of hypoplastron. From a late level of Period II.

KLB-2, locus-XA-15, trench 2 and 3, stratum-7, depth-1.62 m., date 25.2.63.
Fragment of hypoplastron. From a late level of Period II.

KLB-2, locus-XA-17, Qd-4, stratum-2.
Fragment of hypoplastron. From an early level of Period II.

KLB-2, locus-XA-17, Qd-4, stratum-14.
Fragment of hypoplastron. From a middle level of Period II.

Lessymes punctata Gray

KLB-2, locus-XA-9, N.W. Sector, st. 11.
Fragment of hypoplastron. From a middle level of Period II.

KLB-2, locus-E-1, Qdt-1, stratum-28.
Fragment of hypoplastron. From an early level of Period II.

Class AVES
Order GALLINAE
Family PHASIANIDAE
Gallus sp.
KLB-1, locus-C-1, Qd-1, stratum-1, depth-70 cm., date 15.12.62.
Distal fragments of right tibia; proximal fragments of right tarso-metatarsus. From a late level of Period II.

KLB-2, locus-XA-8, Qd-1, stratum-4, depth-0.50 m., date 19.10.62.
Proximal fragment of left femur. From a late level of Period II.

Order COLUMBAE
Family COLUMBIDAE
Columba livia
KLB-2, locus-ZCB-Qd-3, stratum-6, depth-1.25 m., date 25.2.66.
Tibia-tarsus; femur. From a late level of Period II.

Order CARNIVORA
Family CANIDAE
Canis familiaris Linneaus
KLB-1, locus-ZC-8, Qd-2, stratum-12, depth-4.85 m., date 23.2.66.
Fragment of proximal portion of right tibia. From a middle level of Period II.

KLB-1, locus-XC-1, G.D. -2, stratum-2, date 29.12.62.
Fragment of the shaft of right ulna with semilunar notch. From a late level of Period II.

KLB-2, locus-XA-17, Qd-4, stratum-2, depth-13 cm.
Broken left mandible with incisor, canine and premolar. From a late level of Period II.

KLB-2, locus-XA-10, Qd-3.
Fragment of right scapula with coracoid process and glenoid cavity. From a middle level of Period II.

KLB-2, locus-ZA-6, stratum-6a, depth-1.95 m., date 15.12.62.
Fragment of proximal shaft of left femur. From a late level of Period II.

KLB-2, locus-XA-17, Qd-4, stratum-2, depth-13.5 cm.
Incisor-2; premolar-3; molar-1; broken premaxilla and maxilla with teeth; fragment of skull. From a late level of Period II.

KLB-2, locus-XA-9, S.E. Sector, stratum-8, date 13.2.62.
Distal fragment of left humerus; left astragalus. From a middle level of Period II.

KLB-2, locus-B-8, Qd-4, stratum-6, depth-1.70 m., date 29.1.63.
Distal fragment of left radius; proximal fragment of left third metacarpal and fourth metacarpal; distal fragment of left humerus; proximal fragment of the shaft of the left humerus; proximal fragment of left ulna; distal fragment of left humerus; left astragalus. From a late level of Period II.

KLB-2, locus-XA-6, Road-3, stratum-4, depth-63-76 cm.
Fragment of shaft of femur; distal end of shaft of right femur. From a late level of Period II.

Canis lupus Linneaus
KLB-1, locus-T4-9, stratum-nil, depth-1.35 m.
Fragment of condyle of femur; broken lumbar vertebra. From an unstratified level.

KLB-2, locus-XA-6, stratum-6, depth-1.85 m., date 3.2.63.
Fragment of skull. From a late level of Period II.

KLB-2, locus-XA-17, Qd-4, stratum-4, depth-1.20 m., date 1.2.66.
Mandible with broken premolar. From a late level of Period II.

KLB-2, locus-XA-17, Qd-4, stratum-2, depth-13.5 m., date 27.2.66.
Right pelvic girdle; broken lumbar vertebra slit; lumbar vertebra; broken olecranon of left ulna; one complete thoracic vertebra; broken thoracic vertebra-2; left tibia with broken distal end; fragments of ribs; broken olecranon with processus anconoeus of left ulna; distal fragment of fourth metatarsal of hind foot. From a middle level of Period II.

KLB-2, locus-XA-17, Qd-4, stratum-2, depth-13.5 m.
Proximal end of right humerus; lumbar vertebra; metatarsal; proximal end of head of right femur. From a middle level of Period II.

KLB-2, locus-XB-6, stratum-6B, depth-1.92 m.
Axis vertebra; lumbar vertebra. From a late level of Period II.

Family FELIDAE
Felis chaus Goldust.
KLB-2, locus-E-3, D-3, Qd-4, Qd-3, stratum-2, depth-E4-2.70 m. D4-9.90 m., date 14.2.65.
Broken right humerus; fragment of right mandible; first phalanx of hind and fore-foot-7; fragment of proximal end of radius; fragment of distal end of radius; premolar of lower jaw-2; broken olecranon process of ulna; canine; fragment of skull with occipital condyles; parietal bone with foramen magnum; fragment of ribs-2; fragment of tibia-2; sternum bone-3; cervical vertebra-4; proximal end of scapula; fragment of proximal end of humerus; broken lumbar vertebra-3; fragments of left humerus-2; upper fourth premolar; proximal shaft of humerus-2. From a late level of Period II.

Order PROBOSIDAE
Family ELEPHANTIDAE
Elephas maximus Linneaus.
KLB-1, locus-XC-2, Qd-3-4, stratum-1

Broken phalanx of left fore-limb. From a late level of Period II.

KLB-1, locus-ZD-8, Qd-2, pit-1, stratum-8, depth-2.10 cm., date 3.2.66.
Proximal fragments of tibia. From a middle level of Period II.

KLB-2, locus-XA-12, Qd-2, stratum-4, depth-75-90 cm., date 14.1.65.
Fragment of rib. From a late level of Period II.

Order PERISSODACTYLA
Family RHINOCEROTIDA
Rhinoceros unicornis Linneaus
KLB-1, locus-YC-2, Qd-4, stratum-1A, date 25.12.62.
Distal fragment of radius; one broken medial and one broken lateral condyle of left humerus; fragment of the shaft of left ulan-3, (one with trochlear notch). From a late level of Period II.

KLB-1, locus-ZD-8, Qd-4, stratum-4.
Broken right ramus of mandible. From a late level of Period II.

KLB-1, locus-XF-2, Qd-2, stratum-2, depth-65 cm.
Second phalanx of right hind limb. From a late level of Period II.

KLB-1, locus-ZCB, Qd-2, stratum-12, depth-2.50 m., date 23.2.66.
Fragment of right pelvic girdle with acetabulum. From a middle level of Period II.

KLB-1, locus-A-1, stratum-A-11, depth-3.70 m., St. clearance date 2.1.64.
Broken rib-7. From a middle level of Period II.

KLB-2, locus-XA-6, stratum-8, depth-2.15 m.
Left lunate. From a middle level of Period II.

KLB-2, locus-XA-6, stratum-8, depth-6.40 m.
Left trapezoid magnum. From a middle level of Period II.

KLB-2, locus-XA-6, stratum-6A, depth-1.95 m.
Left external cuneiform. From a late level of Period II.

KLB-2, locus-XA-6, stratum-6A, road-4, depth-1.12 m.
Right metacarpal. From a late level of Period II.

KLB-2, locus-XB-7, Qd-1, stratum-5, date 29.1.63.
Right unciform. From a late level of Period II.

KLB-2, locus-F-16, Qd-1 and 2, stratum-1, depth-.80 m., date 10.3.65.
Distal portion of left femur; lumbar vertebra; right astragalus; proximal portion of left ulna. From a late level of Period II.

KLB-2, locus-F-16, Qd-1 and 2, stratum-3, depth- 60 cm., date 25.2.65.
Proximal end of right radius. From a late level of Period II.

KLB-2, locus-XA-17, stratum-10.
Fragment of a rib. From a middle level of Period II.

KLB-2, locus-XA-17, Qd-4, stratun-2.
Broken left pelvic girdle with pubis. From a late level of Period II.

Family EQUIDAE
Equus asinus Linneaus
KLB-1, locus-XC-1, Qd-2, stratum-2, date 29.12.62.
Lower first and second premolar. From a late level of Period I.

Equus hemionus Pallas
KlB-1, locus-ZB-8, Qd-2, stratum-9, depth 1.75 cm. date 5.1.66.
First phalanx; metacarpal (fragment as-

sembled). From a late level of Period II.

KLB-1, locus-XD-4, st. dump-1,3.
Broken first phalanx; second phalanx. From an unstratifed level.

KLB-1, locus-XC-1, GD-2, stratum-2, depth-nil, date 29.12.62.
Broken first phalanx; second phalanx. From a late level of Period II.

KLB-2, locus-XA-17, stratum-4, depth-nil, date 14.2.62.
Fragment of right calcaneum. From a late level of Period II.

Equus caballus Linneaus
KLB-1, locus-F-12, Qd-3, stratum-nil, date 8.1.65.
Upper left second molar (Erupting). From an unstratifed level.

KLB-2, locus-XA-11, Qd-nil, stratum-3, depth-nil, date 30.12.64.
Fragment of the shaft of distal end of femur; distal fragment of left humerus. From a late level of Period II.

Family CERVIDAE
Cervus duvauceli Cuvier
KLB-1, locus-YF-2, Qd-2, stratum-2x.
Distal portion of right tibia. From a late level of Period I.

KLB-1, locus-XD-4, dump-1, stratum-3, depth-nil.
Fragment of the shaft of metacarpal-4; right metacarpal; right third and fourth metacarpal-2; fragment of antler with cut mark; second phalanx-3; fragment of the shaft of tibia; right astragalus; first phalanx. From an unstratified level.

KLB-1, locus-XD-1, Qd-1, stratum-6A.R.
Distal fragment of right humerus; first phalanx. From an early level of Period I.

KLB-2, locus-XA-7, Qdt-3, stratum-11, depth-2.95 m., date 26.2.63.
Right scapho-cuboid; second and third left upper molar; right calcaneum. From a middle level of Period II.

KLB-2, locus-XA-7-XA-8, stratum-1 to 4, depth-1.93 m., date 20.12.62.
First phalanx. From an unstratified level.

KLB-2, locus-XA-7-XA-8, stratum-1 to 4, depth-1.93 m, date 27.2.63.
Fragment of horn core. From a late level of Period II.

KLB-2, locus-XA-6, stratum-pit sealed by 8, depth-3.10 m.
Broken right calcaneum. From a middle level of Period II.

Cervus unicolor Kerr
KLB-1, locus-ZA-1, Qd-1, stratum-3, depth-1 m., date 27.12.63.
First phalanx; distal fragment of third and fourth metacarpal. From a late level of Period II.

KLB-1, locus-YF-2, Qd-2, stratum-2Y, date 8.2.63.
Right scaphacuboid; left scapha cuboid; fragment of rib. From a middle level of Period I.

KLB-1, locus-YA-1, Qd-4, stratum-1, depth-55 cm., date 11.1.63.
Fragment of antler with cut marks. From a late level of Period II.

KLB-1, locus-ZD-8, Qd-1, stratum-5, depth-55 cm., date 23.12.65.
Fragment of antler with cut mark. From a late level of Period II.

KLB-2, locus-XA-6, stratum-6, depth-1.82 m., date 14.12.62.
Left astragalus. From a late level of Period II.

Axis axis Erxl.
KLB-1, locus-XC-1 Qd-2, stratum-17, depth-4.65 m., date 31.1.63.

Distal epiphysis of left femur of a young one. From an early level of Period II.

KLB-1, locus-ZD-8, Qd-1, stratum-14.
Fragment of antler. From a middle level of Period II.

KLB-1, locus-ZD, Qd-1, stratum-5.
Fragment of antler. From a late level of Period II.

KLB-2, locus-XA-7, stratum-22, depth-6.10 m., date 18.3.62.
Body of the vertebra; fragments of anters-2; proximal portion of femur without condyles. From an early level of Period II.

KLB-2, locus-XA-13, Qdt-1, stratum-7, depth-2 m., date 21.2.65.
Distal fragment of left femur with medial and lateral condyles; lumbar vertebra of a young one. From a late level of Period II.

KLB-2, locus-ZB-8, Qd-4, stratum-nil, depth-45 cm.
First phalanx; second phalanx; third phalanx. From an unstratified level.

KLB-2, locus-ZA-15, Qd-2, stratum-nil, depth-.29 m.
Fragment of rib. From an unstratified level.

KLB-2, locus-XA-12, Qd-2, stratum-6, depth-1.20 m., date 16.1.63.
Broken distal end of metacarpal; broken calcaneum; scaphoid. From a late level of Period II.

KLB-2, locus-XA-9, New Sector, stratum-13, date 5.3.63.
Distal end of femur; proximal end of humerus. From a middle level of Period II.

KLB-2, locus-XA-13, Qdt-1, stratum-6, depth-1.35 m., date 17.2.65.
Broken sacral vertebra. From a late level of Period II.
Muntiacus muntijak Zimm.
KLB-2, locus-XA-17, Qd-4, stratum-2.
Fragments of the distal end of right femur (condyle); distal end of humerus. From a late level of Period II.

Sus scrofa Linneaus
KLB-1, locus-XD-4, stratum-dump-1, depth 37 cm.
Fragment of left pelvis with acetabular portion. From an unstratified level.

KLB-1, locus-ZD-8, Qd-2, pit-1, stratum-8, depth-2.10 m., date 3.2.66.
Fragment of a skull; thoracic vertebra without spinous and articular process; fragment of left ramus of mandible with third and forth premolar and first and second molars. From a middle level of Period II.

KLB-1, locus-XF-2, Qd-1, stratum-IB, date 15.12.63.
Left astracalus. From a late level of Period II.

KLB-1, locus-YC-2, Qd-3-4, stratum-1, dump, date 28.2.63.
Fragment left horizontal ramus of mandible; fragment right horizontal ramus of mandible. From an unstratified level.

KLB-2, locus-E-1, Qdt-1, pit-1, date 15.2.62.
Fragment of right calcaneum. From an unstratified level.

KLB-1, locus-ZB-2, stratum-9B, date 23.12.62.
Fragment of third left lower molar; distal fragment of right humerus; distal fragment of right femur; fragment of lumbar vertebra; fragment of right scapula with glenoid cavity. From an early level of Period II.

KLB-1, locus-C-1, Qd-1, stratum-1, depth-70 cm., date 15.2.62.
Fragment of right scapula with glenoid cavity. From a late level of Period II.

KLB-1, locus-YA-8, Qd-2, stratum-5, date 6.3.65.

Left fourth metatarsal. From a late level of Period II.

KLB-1, locus-XD-1, Qd-1, stratum-6 A.P., date 15.12.63.
Fragment of right maxilla with second and third premolar and first molar; distal fragment of left humerus. From an early level of Period I.

KLB-1, locus-YF-2, Qd-3, stratum-3, depth-0.45 m., date 3.2.63.
Right calcaneum without epiphysis. From a late level of Period I.

KLB-1, locus-YF-2, Qd-2, stratum-2Y, depth-0.20 to .40 B.S., date 7.2.62.
Broken left humerus; proximal fragment of left femur; fragment of left pelvic with acetabulum. From a late level of Period I.

KLB-1, locus-YF-2, Qd-3, stratum-2A, date 16.12.62.
Proximal fragment of left radius. From a late level of Period I.

KLB-1, locus-XE-1, Qd-1, stratum-3, date 7.12.63.
Fragment of maxilla with left first and second molar; broken left humerus without epiphysis of an young one; proximal fragment of left tibia of an young one; distal fragment of right humerus; fragment of the body of mandible with one incisor tooth. From a middle level of Period I.

KLB-1, locus-XE-1, Qd-3, stratum-10E, depth-2.00 m.
Broken left lower third molar; fragment of left horizontal ramus of mandible with first and second premolars and first and second molar. From a middle level of Period I.

KLB-1, locus-YA-1, Qd-1, stratum-Baulk YA1-XZA1, date 30.12.62.
Fragment of rib-2. From an unstratified level.

KLB-1, locus-YA-1, Qd-4, stratum-dump IB, depth-2.35 m., date 23.1.63.
Fragment of ramus of left mandible. From an unstratified level.

KLB-1, locus-XC1, Qd-2, stratum-4A, depth-1.35 m., date 9.1.63.
Fragment of right horizontal ramus of mandible with broken second molar. From a late level of Period II.

KLB-1, locus-ZA-1, Qd-1, stratum-1, debris, depth-90 cm.-1 m., date 27.12.62.
Fourth left metacarpal. From a late level of Period II.

KLB-1, locus-XD-1, Qd-1, stratum-6 A.R.
Broken right canine tooth; fragment of maxilla with first and second premolars. From an early level of Period I.

KLB-1, locus-XA-2, stratum-7, date 5.4.62.
Fragment of left mandible with second and third premolars first and third molar. From a middle level of Period II.

KLB-1, locus-YF-2, Qd-2, stratum-22, date 9.2.62.
Fragments of thoracic vertebra-3. From a late level of Period II.

KLB-1, locus-XB-1, Qd-3, stratum-1.
Distal fragment of left humerus; proximal fragment of left femur. From a late level of Period II.

KLB-1, locus-YA-8, Qd-2, stratum-3, date 3.3.65.
Proximal fragment of scapula. From a late level of Period II.

KLB-1, locus-YA-1, Qd-1, stratum-Baulk.
Axis vertebra with dens foramen transversarium arch and broken spinous process. From an unstratified level.

KLB-1, locus-XE-1, Qd-2, pit-1, date 29.1.63.
Fragment of pelvic bone with a portion of

acetabulum. From an early level of Period I.

KLB-1, locus-XD-1, Qd-1, pit-1, stratum-S.R.
Cervical vertebra. From an early level of Period I.

KLB-1, locus-YF-12, Qd-3, stratum-2, depth-95 cm., date 4.2.65.
Fragment of left mandible with first molar; fragment of right mandible with second and third molar (young one). From a late level of Period I.

KLB-1, locus-ZC-8, Qd-2, stratum-12, depth-4.85 m, date 23.2.65.
Fourth metacarpal. From a middle level of Period II.

KLB-1, locus-XB-1, Qd-3, stratum-2, depth-1.05 m.
Right astragalus. From a late level of Period I.

KLB-1, locus-YE-8, Qd-4, stratum-IB, date 14.2.65.
Distal fragment of right radius of an young one without epiphysis. From a late level of Period II.

KLB-1, locus-B5, Qd-1, stratum-3, depth-0.70 m.
Distal fragment of right humerus. From a late level of Period II.

KLB-1, locus-YF-2, Qd-2, stratum-2x, date 6.2.63.
Fragment of rib-3; right fourth metacarpal, proximal fragment of right fourth metatarsal; broken cervical vertebra. From a late level of Period I.

KLB-2, locus-XA-12, Qd-2, stratum-4, depth-75.90 cm., date 14.1.65.
Thoracic vertebra; fragment of mandible with molar; fragment of mandible; condyles of the distal end of femur; broken metatarsal; first phalanx. From a late level of Period I.

KLB-2, locus-XA-17, stratum-15.
Distal fragment of left humerus; proximal fragment of right ulna with semilunar notch; right astraglus; distal fragment of right tibia; broken left calcaneum; fragment of right scapula with glenoid cavity. From a middle level of Period I.

KLB-2, locus-XA-9, Qdt-1 and 2, stratum-20, depth-4 m.
Distal fragment of left femur with medial condyle; fragment of parietal bone; fragment of left pelvis; fragment of right femur without distal epiphysis of an young one; fragment of left mandible with second molar and first premolar of an young one; proximal fragment of right ulna with semilunar notch; fragment of right scapula with glenoid cavity. From an early level of Period II.

KLB-2, locus-XA-9, stratum-12.
Distal fragment of left humerus; distal fragment of left tibia; fragment of left pelvis with acetabulum. From a middle level of Period II.

KLB-2, locus-XA-7, Qd-4, stratum-4, depth-2.30 m.
Distal fragment of left femur; fragment of right pelvis with acetabulum; distal fragment of right humerus. From a late level of Period II.

KLB-2, locus- Qd-1, stratum-2, depth-0.15 m.
Broken cervical vertebra; fragment of horizontal ramus of right mandible; fragment of horizontal ramus of left mandible. From a late level of Period II.

KLB-2, locus-XA-8, Qd-1, stratum-5, depth-0.95 m., date 25.12.62.
Fragment of right third metatarsal. From a late level of Period II.

KLB-2, locus-XA-9, stratum-3.
Distal fragment of left humerus without epiphysis of an young one. From a late level of Period II.

KLB-2, locus-XA-6, N.S. stratum-7, depth-2.50 m., date 12.3.62.
Fragment of the horizontal left ramus of mandible with third molar. From a late level of Period II.

KLB-2, locus-XA-7, Qd-4, stratum-11, depth-2.25 m.
Fragment of right ulna with semilunar notch. From a middle level of Period II.

KLB-2, locus-XA-6, Qd-1, stratum-25.
Fragment of right ulna with semilunar notch. From an early level of Period II.

KLB-2, locus-XA-6, stratum-3, depth-1.17 m.
Fragment of right calcaneum; first phalanx. From a late level of Period II.

KLB-2, locus-XA-7, stratum-20, depth-5.60 m., date 17.3.62.
Distal fragment of right radius without epiphysis. From am early level of Period II.

KLB-2, locus-XA-8, S.E. Sector, stratum-23, date 15.10.62
Fragment of rib; fragment of lumbar vertebra; first phalanx; distal fragment of right femur with medial lateral condyle. From an early level of Period II.

KLB-2, locus-XB-7, Qd-4, stratum-2N, depth-0.75 m., date 1.2.63.
Broken left astragalus; distal fragment of right femur; fragment of mandible with broken teeth. From a late level of Period II.

KLB-2, locus-XA-9, S.W. Sector date 26.2.62.
Fragment of the ramus of mandible. From an unstratified level.

KLB-2, locus-XA-7, Qdt-3, stratum-5, depth-1.10 m.
Fragment of the ramus of mandible of an young one; atlas vertebra. From a late level of Period II.

KLB-2, locus-XB-2, Qd-3, stratum-3, depth-1.00 mts., date 22.1.63.
Fragment of left calcaneum; fragment of pelvic bone with acetabulum. From a late level of Period II.

KLB-2, locus-XA-6, stratum-2, depth-1.50 m., date 27.2.62.
Distal fragment of third and fourth left metacarpal. From a late level of Period II.

KLB-2, locus-D5, Qd-2, stratum-3x, date 15.2.64.
Fragment of left pelvis. From a late level of Period II.

KLB-2, locus-XA-7, XA-8, stratum-1 to 4, depth-1.93 m., date 27.2.62.
Fragment of right horizontal ramus of mandible with 3[rd] molar; fragment of right horizontal ramus of mandible with first molar. From an unstratified level.

KLB-2, locus-XA-6, stratum-1, depth-70 cm., date 1.3.62.
Proximal fragment of right ulna with semilunar notch. From a late level of Period II.

KLB-2, locus-XA-6, road-3, depth-.97 cm.
Proximal fragment of left tibia. From a late level of Period II.

KLB-2, locus-XA-6, stratum-22, depth-6.40 m.
Broken right astragalus. From an early level of Period II.

KLB-2, locus-XA-9, Qd-3, stratum-17 SE, depth-3.35 m., date 28.3.62.
Distal fragment of left humerus; fragment of right pelvic bone with the acetabular part. From an early level of Period II.

KLB-2, locus-XA-8, Qd-1, stratum-8, depth-1.85 m., date 23.12.62.
Right carpal bones - (scaphoid, lunate, cuneiform, trapezoid, magnum and unciform); distal fragment of right radius. From a middle level of period II.

KLB-2, locus-ZEI, stratum-3w, date 22.2.62. Distal fragment of left humerus. From a late level of Period II.

KLB-2, locus-E-1, stratum-21, date 24.3.62. Broken upper second molar; broken right calcaneum. From an early level of Period II.

KLB-2, locus-XA-6, stratum-7, depth-2.50 m. Fragment of right horizontal ramus of mandible with second molar. From a late level of Period II.

KLB-2, locus-XA-6, stratum-8, depth-2.68 m. Fragment of a rib with head and tubercle. From a middle level of Period II.

KLB-2, locus-XA-6, pit-6, depth-1.20 m. Body of the left mandible. From a late level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-2. Right astragalus-2. From a late level of Period II.

KLB-2, locus-XA-12, Qd-2, stratum-4, depth-1 to 1.10 m., date 15.1.65. Left third metacarpal; fragment of distal portion of humerus; fragment of maxilla with broken first molar; second and third premolars. From a late level of Period II.

KLB-2, locus-A-6, Qd-3, stratum-6, date 21.2.62. Broken maxilla with first and second molars and third premolar. From a late level of Period II.

KLB-2, locus-XA-13, Qd-1, stratum-4, depth-1.02 m., date 14.2.65. Upper left maxilla with first molar; second and third premolar; upper right maxilla with third, second and first molar; third premolar. From a late level of Period II.

KLB-2, locus-XA-15, Qd-1, stratum-5, depth-1.45 m., date 7.2.65. Distal end of left tibia; fragment of metatarsal. From a late level of Period II.

KLB-2, locus-XA-8, Qd-1, stratum-2, depth-0.25 m. Proximal fragment of left radius. From a late level of Period II.

KLB-2, locus-XA-8, stratum-2, depth-1.20 m., date 26.12.62. Fragment of a rib. From a late level of Period II.

KLB-2, locus-XA-9, stratum-13. Fragment of second phalanx; fragment of cervical vertebra; proximal fragment of left tibia; fragment of right lower mandible; fragment of right radius with semilunar notch. From a middle level of Period II.

KLB-2, locus-XA-6, stratum-17, depth-4.17 m., date 26.3.62. Fragment of horizontal ramus of left mandible with first, second and broken third molar, fragment of a rib; fragment of thoracic vertebra. From an early level of Period II.

KLB-2, locus-E-1, stratum-20. Distal fragment of right humerus with lateral and medial condyles. From an early level of Period II.

KLB-2, locus-E-8, Qd-4, stratum-2. Fragment of atlas vertebra. From a late level of Period II.

KLB-2, locus-B-7, Qd-3, depth-2.50 m. Fragment of right horizontal ramus of mandible. From a late level of Period II.

KLB-2, locus-XA-9, N.W.S. stratum-5, date 13.2.62. Distal fragment of right humerus. From a late level of Period II.

KLB-2, locus-XA-9, S.E. Sector, stratum-8, date 13.2.62. Body fragment of cervical vertebra. From a middle level of Period II.

KLB-2, locus-XA-8, S.W. Sector, stratum-15, date 18.3.62.
Fragment of the body of mandible. From a middle level of Period II.

KLB-2, locus-XA-6, stratum-17, depth-5.1 m.
Fragment of a rib; fragment of the horizontal rumus of right mandible. From an early level of Period II.

KLB-2, locus-ZE-1, stratum-2(w), date 28.2.62.
Proximal fragment of left radius; fragment of right astragalus. From a late level of Period II.

KLB-2, locus-XA-3, Qd-3, stratum-16, depth-3.25 m., date 28.3.62.
Right radius of a young one without distal epiphysis. From a middle level of Period II.

KLB-2, locus-XB-7, Qd-3, stratum-8S, depth-1.90 m., date 5.2.63.
Distal fragment of left ulna with semilunar notch. From a middle level of Period II.

KLB-2, locus-XB-7, Qd-3, stratum-7S, depth-1.80 m., date 2.3.63.
Fragment of right pelvis with the acetabular part. From a late level of Period II.

KLB-2, locus-XA-2, S.W.Sector, pit-4, SB-J, stratum-2, depth-6.40 m., date 20.3.64.
Fragment of rib; distal fragment of left radius without epiphysis; broken left metatarsal without epiphysis. From a late level of Period II.

KLB-2, locus-YA-15, Qd-3, stratum-3, date 11.2.65.
Distal fragment of right femur of a young one without epiphysis. From a late level of Period II.

KLB-2, locus-XA-13, Qdt-1, stratum-7, depth-2 m., date 21.2.65.
Distal epiphysis of left femur with condyles. From a late level of Period II.

KLB-2, locus-XA-6, stratum-4X, depth-1.32 m., date 25.12.62.
Distal fragment of left humerus; fragment of thoracic vertebra; fragment of cervical vertebra. From a late level of Period II.

KLB-2, locus-XA-6, stratum-4X, depth-1.32 m., date 25.12.65.
Distal fragment of left femur; fragment of a rib without head, neck and tubercle. From a late level of Period II.

KLB-2, locus-XA-11, Qd-2, stratum-3, depth-0.75 m., date 30.12.64.
Fragment of lower third molar. From a late level of Period II.

KLB-2, locus-XA-12, Qd-4, stratum-2, depth-35 cm., date 11.2.65.
Fragment of left tibia without epiphysis; lower second molar. From a late level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-4, depth-1.12 m., date 3.2.65.
Distal fragment of left tibia; proximal fragment of right femur. From a late level of Period II.

KLB-2, locus-XA-9, Qdt-1, stratum-12, depth-1.92 m., date 5.1.63.
First phalanx. From a middle level of Period II.

KLB-2, locus-XA-8, stratum-23.
Fragment of left horizontal ramus of mandible of a young one. From an early level of Period II.

KLB-2, locus-XA-7, Qd-4, stratum-7.
Fragment of thoracic vertebra; fragment of spine of thoracic vertebra; fragment of cervical vertebra-2. From a late level of Period II.

KLB-2, locus-XA-8, Qd-1, stratum-6, date 21.2.62.
Distal fragment of right tibia. From a late level of Period II.

KLB-2, locus-XA-6, stratum-6, depth-1.82 m., date 14.12.62.
Fragment of left pelvis. From a late level of Period II.

KLB-2, locus-ZE-1, stratum-4W.
Proximal fragment of left radius. From a late level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-5, depth-1.40 m., date 6.2.65.
Left fourth metatarsal of a young one without epiphysis; fragment of parietal bone. From a late level of Period II.

KLB-2, locus-XA-15, trench 2 and 3, stratum-7, depth-1.62 m., date 25.2.65.
Fragment of horizontal left ramus of mandible with second and third premolar and first molar; first phalanx-2; second phalanx-1. From a late level of Period II.

KLB-2, locus-XA-6, stratum-16, depth-4.75 m., date 26.3.62.
Distal fragment of left humerus. From a middle level of Period II.

KLB-2, locus-XA-2, Qd-4, stratum-4, date 20.2.65.
Fragment of portion of posterior lateral part of right maxilla with three molars. From a late level of Period II.

KLB-2, locus-XA-17, Qd-4, stratum-2, depth-13 cm.
Lumbar vertebra; distal fragment of left humerus; broken right callcaneum. From a late level of Period II.

KLB-2, locus-XA-10, Qd-3, stratum-4.
Proximal end of right radius; broken distal shaft of humerus; fragment of mandible. From a late level of Period II.

KLB-2, locus-XB-17, Qdt-2, stratum-3, depth-2.80 m.
Distal fragment of right radius. From a late level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-3, depth-1.05 m., date 2.2.65.
Fragment of distal end of left humerus; broken right metatarsal. From a late level of Period II.

KLB-2, locus-XA-9, stratum-4.
Distal fragment of left humerus. From a late level of Period II.

KLB-2, locus-XA-6, Qd-1, stratum-2E, depth-0.30 m., date 27.12.64.
Fragment of horizontal ramus of mandible of a young one. From a late level of Period II.

KLB-2, locus-XA-2, Qd-2, stratum-8S, depth-1.40 m., date 4.2.65.
Right unciform; right trapezoid and magnum. From a middle level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-6, depth-1.85 m., date 9.2.65.
Fragment of frontal bone; proximal fragment of left femur of a young one without head. From a late level of Period II.

KLB-2, locus-XA-14, Qd-4, stratum-4, depth-0.55 m., date 6.2.65.
Proximal fragment of right humerus. From a late level of Period II.

KLB-2, locus-XB-7, Qd-4, stratum-6N, depth-1.20 m., date 5.2.63.
Right metacarpal; proximal fragment of right radius of a young one. From a late level of Period II.

KLB-2, locus-XA-6, N. sector, stratum-8, depth-2.60 m.
Fragment of horizontal ramus of right mandible of a young one; fragment of left horizontal ramus of mandible with two molars and broken first molar; fragment of left calcaneum. From a middle level of Period II.

KLB-2, locus-XA-12, Qd-2, stratum-4, depth-1 to 1.10 m., date 15.1.65.
Left third metacarpal; right astragalus-2;

fragment of distal portion of humerus. From a late level of Period II.

KLB-2, locus-XA-3, Qd-3, stratum-18 SE, depth-3.45 m., date 29.3.62.
Fragment of a rib; proximal fragment of right tibia without epiphysis. From an early level of Period II.

KLB-2, locus-XA-6, stratum-pit sealed by 8, depth-3.10 m., date 15.3.62.
Axis vertebra with odontoid process; right medial and lateral condyles of femur; posterior fragment of left scapula with glenoid cavity; proximal fragment of left radius. From a middle level of Period II.

KLB-2, locus-XA-6, stratum-4X, depth-1.16 m., date 23.12.62.
Right third metatarsal. From a late level of Period II.

KLB-2, locus-B-7, Qd-3, stratum-3, depth-0.95 cm., date 20.12.62.
Fragment of right maxilla with first and second molars. From a late level of Period II.

KLB-2, locus-XA-6, stratum-5, depth-2..94 m.
Distal fragment of left femur without epiphysis; fragment of parietal bone with a portion of temporal fossa and parietal bone; fragment of atlas vertebra; fragment of left scapula with glenoid cavity; proximal fragment of right tibia. From a late level of Period II.

KLB-2, locus-XA-9, Qdt-3 and 4.
Proximal fragment of right scapula with glenoid cavity; fragment of skull with parietal and occipital condyle. From an unstratified level.

KLB-2, locus-XB-7, Qd-4, stratum-4, depth-0.90 m.
Fragment of right maxilla with third premolar and broken second premolar. From a late level of Period II.

KLB-2, locus-XA-17, stratum-14.
Left calcaneum without epiphysis; broken left third metacarpal without epiphysis; broken left astragalus; distal fragment of left tibia; anterior fragment of left horizontal ramus of mandible of a young one with second and third premolar and first molar. From an early level of Period II.

KLB-2, locus-XB-8, stratum-3, depth-1.30 m.
Axis vertebra; right calcaneum without epiphysis; fragment of right astragalus; fragment of right calcaneum. From a late level of Period II.

KLB-2, locus-XA-9, S.W. Sector, stratum-9, date 21.2.62.
Fragment of left ulna with semilunar notch; third right metacarpal without epiphysis. From a middle level of Period II.

Bos indicus Linn.
KLB-1, locus-C-1, Qd-1, stratum-1A, depth-1.20 m., date 20.2.62.
Distal fragment of left tibia; left astragalus. From a late level of Period II.

KLB-1, locus-2E-2., Qd-3, stratum-16, date 3.4.62.
Broken right upper first and second molar. From a middle level of Period II.

KLB-1, locus-XA-1, Qd-1, stratum-1, date 24.1.63.
Broken right astragalus calcaneum; scapho-cuboid; first phalanx; right tibia-proximal and distal fragment; fragment of pelvic bone with acetabulum; proximal fragment of right metatarsal; fragment of right scapula with glenoid cavity, coracoid process and a portion of neck; proximal fragment of right femur with head and a portion of trochanter; shaft of right femur. From a late level of Period II.

KLB-1, locus-ZC-8, Qd-2, stratum-13, depth-20m., date18.2.63.

Right horizontal ramus of mandible with second and third molars carpus mandible; shaft of right femur. From a late level of Period II.

KLB-1, locus-D2, Qd-1, stratum-3, depth 60 cm. to 1 m., date 11.2.63.
Second phalanx; left metacarpal-proximal fragment. From a late level of Period II.

KLB-1, locus-XB-1, Qd-3, stratum-3, depth 90 cm.
First, second third phalanges; broken left upper first; second and right upper second molars; right scaphoid; left scapho-cuboid; right metatarsal distal fragment. From a late level of Period I.

KLB-1, locus-XC-1, Qd-2, pit-1, date 1.1.63.
First and second phalanges; candal vertebras; fragment of rib. From a late level of Period II.

KLB-1, locus-ZD-2, stratum-7A.
Left femur-distal fragment; broken right scaphoid; right calcaneum; first phalanx; broken shaft of right femur. From a late level of Period II.

KLB-1, locus-YC-2, Qd-3-4; date 28.12.64.
Right tibia-proximal fragment; femur-two heads; metatarsal; fist phalanx; right astragalus; femur-distal end with medial, lateral condyle; right metacarpal-distal end. From a late level of Period II.

KLB-1, locus-YF-9; Qd-1, date 9.1.65.
Proximal fragment of left tibia with lateral condyle; right metatarsal; proximal fragment; fragment of spine of thoracic vertebra. From an unstratified level.
KLB-1, locus-YE-8, Qd-4, stratum-1, date 14.2.65.
Thoracic vertebra; 3 fragments; left femur-proximal fragment with head; shaft of femur; first phalanx; right calcaneum; fragment of rib; shaft of metatarsal; left ramus of mandible. From a late level of Period II.

KLB-1, locus-XA-5, Qd-2, depth-1.10 cm.
Fragment of left patella; left metatarsal; left tibia; left lower second pre-molar. From a late level of Period II.

KLB-1, locus-YF-12, Qd-3, dump sealed by layer-2, date 6.1.65.
Left upper first and second molars; first premolar (all charred) left lower third molar; right lower first and second molars. From a late level of Period II.

KLB-1, locus-XB-1, Qd-3, stratum-2, depth-1.05 m.
Second phalanx; left scaphocuboid; right radius-distal fragment From a late level of Period II.

KLB-1, locus-ZD-2, pit 3. S.D. stratum-3A, depth-1.55 m.
Left astragalus. From a late level of Period II.

KLB-1, locus-ZD-2, pit 3. S.D. stratum-7, depth-2.20 cm., date 21.2.65.
Thoracic vertebra; blade of scapula. From a late level of Period II.

KLB-1, locus-YA-8, Qd-2, stratum-7, date 7.2.65.
Right femur-fragment of shaft; first phalanx. From a late level of Period II.

KLB-1, locus-ZD-2, stratum-7.
Broken right astragalus; patella; second phalanx. From a late level of Period II.

KLB-1, locus-ZA-2, Qd-3, stratum-29A, date 27.12.62.
First phalanx. From an early level of Period II.

KLB-1, locus-YD-2, Qd-3, stratum-2, depth-1.10 m., date 16.2.62.
Right metatarsal-distal fragment. From a late level of Period II.

KLB-1, locus-YA-8, Qd-2, stratum-5, date 6.3.65.
Fragment of mandible; rib fragment -3; proxi-

mal end of right scapula with glenoid cavity; shaft of the left metacarpal; metatarsal and metacarpal-distal ends; broken left ulna with olicranon process. From a late level of Period II.

KLB-1, locus-XA-15, stratum-3.
Upper right first and third molars, second and third pre-molars. From a late level of Period II.

KLB-1, locus-ZB-8, Qd-3, stratum-6, depth-1.85 m. date 21.2.65.
Metatarsal-distal end; fragment of mandibular condyle; right humerus-distal end. From a late level of Period II.

KLB-1, locus-YF-12, Qd-3, depth-95 cm., date 6.1.63.
Upper right second molar; pre-molar; first and second phalanges; fragment of rib; right humerus-distal end with condyle; right radius; left tibia; left calcaneum; rib fragment-2; right lunate; right lower second molar; first and second pre-molars. From a late level of Period II.

KLB-1, locus-XE-1, Qd-2, pit-1, stratum-2, date 30.1.63.
Broken left and right calcaneum. From a late level of Period I.

KLB-1, locus-YC-2, Qd-4, stratum-1A, date 25.12.62.
Left astragalus; distal fragment of metatarsal. From a late level of Period I.

KLB-1, locus-ZK-13, Qd-9, stratum-5, depth-1.85 m., date 4.3.62.
Upper first molar. From a late level of Period II.

KLB-1, locus-ZA-2, stratum-10X, depth-1.85 m., date 1.1.63.
Right wing of sacrum; second phalanx. From a middle level of Period II.

KLB-1, locus-YA-1, Qd-4, stratum-1, dump. depth-0.54 cm. date 10.1.65.
Distal fragment of right metacarpal; fragment of sacrum vertebra; fragment of horn-core. From a late level of Period II.

KLB-1, locus-C-1, Qd-1, stratum-1, depth-70 cm., date 15.12.62.
Two first and two third phalanges; distal fragment of metacarpals-2; right metatarsal-distal fragment. From an early level of Period II.

KLB-1, locus-XE-2, Qd-2, stratum-3, date 5.2.64.
Right scapho-cuboid; fragment of right frontal bone of the skull; rib fragment-2; third right lower molar. From a late level of Period II.

KLB-1, locus-ZD-8, Qd-2, pit-1, stratum-8, depth-2.10 cm., date 3.2.60.
Two first and broken third phalanges; broken left astragalus; cervical vertebra-2. From a late level of Period II.

KLB-1, locus-YC-2, Qd-4, stratum-2, depth-1.36 m.
Left astragalus; right tibia-distal fragment. From a late level of Period II.

KLB-1, locus-ZB-2, stratum-7B and 9C, date 10.1.69.
Right calcaneum. From a late level of Period II.

KLB-1, locus-XA-1, Qd-1, dump-1, date 23.1.62.
Left astragalus; distal fragment of metatarsal. From an unstratified level.

KLB-1, locus-YF-2, Qd-3, stratum-2, date 14.12.62.
Broken left upper first and third pre-molars. From a late level of Period I.

KLB-1, locus-YF-2, Qd-3, stratum-5, date 18.12.62.
Right scapho-cuboid. From a middle level of Period I.

KLB-1, locus-XF-1, Qd-2, stratum-3.
Fragment of olecranon of right ulna. From an early level of Period I.

KLB-1, locus-XE-2, Qd-2, stratum-3, date 6.2.64.
Upper right two second molars and two third pre-molars; upper left first molar and third pre-molar; first, second and third phalanges; blade of scapula; right calcaneum-2. From a late level of Period II.

KLB-1, locus-YG-1, Qd-2, stratum-8, date 26.12.63.
Broken left patella; first and second left upper molars. From a late level of Period II.

KLB-1, locus-D9, Qd-3, stratum-6, depth-1.05m.
Fragment of left horizontal ramus of mandible with first, second pre-molars and first, second and third molars. From a late level of Period II.

KLB-1, locus-XF-2, Qd-1, stratum-3, depth-.37 m. date 13.12.67.
First phalanx. From a late level of Period II.

KLB-1, locus-ZB-2, stratum-7B, date 23.12.62.
Left calcaneum; left scapho-cuboid; right patella; right femur-proximal fragment with trochanter major. From a late level of Period I.

KLB-1, locus-ZB-2, pit-3, stratum-6, date 27.3..62.
Second phalanx. From a late level of Period I.

KLB-1, locus-XE-1, Qd-1, stratum-4, date 3.2.62.
Right metacarpal-proximal fragment; broken left calcaneum; left scapho-cuboid with large cuneiform and small cuneiform. From a middle level of Period I.

KLB-1, locus-ZC-2, stratum-9, date 20.12.63.
Posterior fragment of right scapula; left calcaneum; thoracic vertebra; right metatarsal-proximal fragment; left vertical ramus of mandible with condyle, mandibular notch and broken cornoid process. From an early level of Period I.

KLB-1, locus-XC-1, Qd-2, stratum-2.
First phalanx-4; second phalanx-1, third phalanx-1; left lunate; right humerus-distal fragment; left radius-distal fragment. From a late level of Period I.

KLB-1, locus-B5, Qdt-1, stratum-3, depth-0.70 m.
Right lower third pre-molar. From a late level of Period I.

KLB-1, locus-YA, Qd-4, dump-1, depth 1.3 m.
Right metacarpal-distal fragment. From a late level of Period II.

KLB-1, locus-YF-2, Qd-2, stratum-2x, date 5.3.63.
Left humerus-distal fragment; right lunate; fragment of pelvic girdle; rib fragment; fragment of axis vertebra. From a late level of Period I.

KLB-1, locus-XC-2, Qd-2, dump-1, date 27.12.62.
First phalanx-2; right tibia-distal fragment; left astragalus; distal fragment of metatarsal-3. From a late level of Period II.

KLB-1, locus-D3, Qd-1, stratum-9, S.W. depth-1.60-1.65, date 3.3.63.
Second lower right pre-molar; left lunate; vertical ramus of right mandible. From a middle level of Period II.

KLB-1, locus-ZB-9, Qd-2, stratum-6, depth-1.10, date 22.2.64.
Left astragalus; second phalanx; upper molar. From an early level of Period I.

KLB-1, locus-E-1, stratum-18 and 19.
First phalanx-4; second phalanx-3; third phalanx-2; right astragalus; right scapho-

cuboid-3; broken cervical vertebra-2; caudal vertebra-1; left unciform; left lower third molar; second, third pre-molars; broken shaft of right femur; distal end of left radius; distal end of left metatarsal-2; broken shaft of metatarsal-1, metacarpal-distal end. From an early level of Period II.

KLB-1, locus-XD-1, Qd-1, stratum-6 A.R. date 15.12.63.
Proximal epiphysis of right humerus; fragment of left scapula with glenoid cavity; rib fragment; fragment of right pelvis and left pelvis with a portion of acetabulum and ilium; left humerus-distal fragment; fragment right horizontal ramus of mandible with first, second and third pre-molars; fragment left horizontal ramus of mandible with third molar. From an early level of Period I.

KLB-1, locus-YD-2, Qd-3, stratum-3, depth-1.70 m., date 19.1.62.
Left humerus-distal fragment. From a late level of Period II.

KLB-1, locus-YF-2, Qd-3, stratum-3, depth-1.35 m., date 27.2.62.
Fragment of cervical vertebra; distal epiphysis of left femur. From a late level of Period I.

KLB-1, locus-YF-2, Qd-2, stratum-2Y, depth .20-.40 cm. date 7.2.62.
Broken thoracic vertebra; lumber vertebra; left calcaneum; and broken right scaphocuboid; rib fragment with head and tubercle. From a late level of Period I.

KLB-1, locus-YF-2, Qd-3, stratum-2A, date 16.12.62.
Broken left calcaneum; axis vertebrae-2 fragments; broken pelvic girdle; left patella; right first and second molars. From a late level of Period I.

KLB-1, locus-YF-2, Qd-3, stratum-4, depth-1.65 m., date 4.1.63.
Broken left pelvic girdle; left patella; scaphoid; broken first phalanx; right scaphocuboid; right upper second molar; broken thoracic vertebra; left radius proximal fragments-2 From a middle level of Period I.

KLB-1, locus-2C-2, stratum-9A, date 21.12.62.
Body fragment of thoracic vertebra; right radius-proximal fragment. From a middle level of Period I.

KLB-1, locus-D2, Qd-1, stratum-1, depth-10 cm. to 40 cm., date 9.2.63.
Right scapho-cuboid; astragalus. From a late level of Period II.

KLB-1, locus-YA-1, Qd-1, stratum-Banlk.
First and second phalanges; right humerus-distal fragment-2; left tibia-distal fragments; caudal vertebra. From an unstratified level.

KLB-1, locus-XE-1, Qd-2, pit-1, date 29.1.63.
Right astragalus; left tibia-distal fragment; right scapho-cuboid; left patella; fragment of right scapula with glenoid cavity; proximal fragment of right metacarpal; right metatarsal-2 fragments. From an early level of Period I.

KLB-1, locus-XD-1, Qd-1, pit-1, stratum-5R.
Left scapho-cuboid; first phalanx; right calcaneum; rib fragment; fragment of right upper third molar of a young one. From a middle level of Period I.

KLB-1, locus-YC-2, Qd-4, stratum-1A, depth-1.05 m., date 16.2.62.
Metacarpal-distal fragment; first phalanx; right astragalus; broken caudal vertebra; atlas vertebra. From a late level of Period I.

KLB-1, locus-YE-8, Qd-4, stratum-1, date 13.2.65.
Third phalanx; fragment of rib; broken metatarsal. From a late level of Period II.

KLB-1, locus-ZB-8.0 Qa, stratum-9, depth-

1.75 m., date 5.1.62.
Body of the vertebra; fragment of metatarsal; first phalanx. From a late level of Period II.

KLB-1, locus-YA-8, Qd-2, stratum-3, date 5.3.65.
Right radius-distal fragment-2; first phalanx-2; second phalanx-4; left radius-distal fragments-2; left astragalus-2; distal fragment of left humerus with medial condyle with chopping mark; fragment of condyles of left humerus with chopping mark; molar bone with zygomatic and temporal processes. From a late level of Period II.

KLB-1, locus-XB-1, Qd-3, stratum-2, depth-50 cm., date 10.2.62.
First phalanx-11; second phalanx-3; left patella; scaphoid; unciform; fragment of right pelvis; right calcaneum; trapezoid magnum-2 left and 2 right. Left radius-distal fragment; metatarsal-distal fragment; fragment of left scapula with glenoid cavity. From a late level of Period II.

KLB-1, locus-YA-1, Qd-4, dump-1, date 12.1.63.
Astragalus-broken left and right; left calcaneum; first phalanx-3 fragments; third phalanx - 1; right scapho-cuboid; metacarpal-distal fragment. From a late level of Period II.

KLB-1, locus-YF-12, Qd-3, Layer 2, sealed, date 6.1.65.
First phalanx-2; second phalanx-1; right scaphoid; shaft of left tibia; distal fragment of metacarpal. From a late level of Period II.
KLB-1, locus-ZCB, Qd-2, stratum-9, date 29.12.63.
Broken axis vertebra; fragment of horn core. From a middle level of Period II.

KLB-1, locus-XF-1, Qd-4, stratum-25.
Left astragalus. From a middle level of Period I.

KLB-1, locus-XA-1, Qd-1, depth-0.35 m., date 16.1.63.
Caudal vertebra. From a late level of Period II.

KLB-1, locus-XD-1, Qd-1, stratum-6AR.
First phalanx; left lower first molar; left and right pelvis with a portion of acetabulum; horizontal ramus of righ⁺ mandible with second molar. From an early level of Period I.

KLB-1, locus-XA-15, trench 2 and 3, stratum-7, depth-1.62 m., date 25.2.62.
Right humerus-2 fragments. From a late level of Period II.

KLB-1, locus-YA-8, Qd-2, stratum-5, date 5.3.65.
Fragment of left calcaneum; right lower first, second molars and third pre-molar; distal end of shaft tibia (young one); fragment of ramus of mandible. From a late level of Period II.

KLB-1, locus-YF-12, Qd-1, dump-1, No. 46r.
Distal end shaft of radius. From a late level of Period II.

KLB-1, locus-YF-12, Qd-3, stratum-2, depth-95 cm., date 4.1.65.
Second phalanx-3; first phalanx-1; two left and a right scaphocuboid; left lunate-2; right lunate-1; third phalanx; right unciform; left and right cuneiform; 1 left, 1 right, trapezoid and magnum. From a late level of Period II.

KLB-1, locus-YC-8, Qd-3, stratum-dump, date 28.2.65.
Fragment of the right ramus of mandible; proximal end fragment of left tibia; right upper first, second, third molar of young one. From an unstratified level.

KLB-1, locus-ZB-19, Qd-2, stratum-8, depth-150-180 cm., date 17.2.65.
Right upper first and second molars and left upper first molar; left metacarpal-distal fragment; metacarpal-proximal fragment. From

a late level of Period II.

KLB-1, locus-YE-8, Qd-4.
Right tibia-distal fragment. From an unstratified level.

KLB-1, locus-ZD-8, Qd-3, stratum-3, date 2.4.62.
Glenoid cavity of scapula; broken pieces of vertebra. From a late level of Period II.

KLB-1, locus-ZC-6 (B.K.)., stratum-4, depth-1.75 cm., date 21.2.65.
First phalanx; proximal end of radius. From a late level of Period II.

KLB-1, locus-W-4, dump-1, date 12.9.58.
Horn-core-8 fragments. From an unstratified level.

KLB-1, locus-ZB-19, Qd-2, stratum-8, depth-1.50-1.80 m., date 17.2.66.
Left calcaneum-2 fragment; broken left astragalus; axis vertebra-2; first and second vertebra. From a late level of Period II.

KLB-1, locus-ZB-8, Qd-2, stratum-19.
Fragment of right scapula with glenoid cavity; broken first phalanx; distal end of metatarsal; lower right third molar; rib fragment. From an early level of Period II.

KLB-1, locus-ZCB, Qd-1, stratum-12, depth-4.85 cm., date 23.2.65.
Upper first molar. From a middle level of Period II.

KLB-1, locus-ZD-8, Qd-1, stratum-5, depth-55 cm., date 23.2.65.
Incisor; left third molar. From a late level of Period II.

KLB-1, locus-ZA-8, Qd-4, stratum-7, depth-1.35 m.
Scaphoid; left unciform. From a late level of Period II.

KLB-1, locus-YA-8, Qd-2, stratum-4, date 5.3.65.
Right metatarsal-distal end. From a late level of Period II.

KLB-1, locus-ZD-8, Qd-2, pit-2, statum-8.
First phalanx-1; second phalanx-1; right astragalus; right metacarpal; metatarsal-distal end; fragment of calcaneum; thoracic vertebra-2 fragments. From a late level of Period II.

KLB-1, locus-ZB-19, Qd-2, stratum-8, depth-1.50 - 1.80 m.
Distal end with condyles of right femur; proximal end with shaft of left metatarsal. From a late level of Period II.

KLB-1, locus-ZC-8, Qd-4, stratum-5.
Proximal portion and shaft of metacarpal. From a late level of Period II.

KLB-1, locus-ZD-8, Qd-4, stratum-15, depth-2.40 m., date 9.1.64.
Horn-core. From a middle level of Period II.

KLB-1, locus-YF-12, Qd-3, stratum-2, depth-95 cm.
Distal end of radius-1; first phalanx-3. From a late level of Period II.

KLB-1, locus-YA-8, Qd-2, stratum-5, date 5.3.65.
Fragment of medial and lateral condyle of right humerus with cutting mark; Proximal fragment of left humerus of an young one; fragment of atlas vertebra; medial condyle of right tibia; left cuneiform; fragment of horizontal left ramus of mandible with third molar; upper right third molar. From a late level of Period II.

KLB-1, locus-YE-8, Qd-4, stratum-1B, date 14.2.65.
Distal fragment of large metatarsal with condyle (charred); fragment of blade of scapula; left calcaneum-2 fragment. From a late level of Period II.

KLB-1, locus-T-4, stratum-9, depth-1.35 m.

Distal end of humerus-1, rib fragment; right radius-distal end; left scaphoid and lunate; second phalanx-2; right patella. From a middle level of Period II.

KLB-1, locus-XE-2, Qd-2, stratum-3.
Fragment of right calcaneum of young one; fragment of left third molar. From a late level of Period II.

KLB-1, locus-YA-1, Qd-4, depth-0.55 m., date 11.1.65.
Fragment of the vertical ramus of mandible comprising of coronoid process; condyler part of the mandible. From a late level of Period II.

KLB-1, locus-ZD-8, Qd-4, stratum-2, depth-40 cm., date 4.2.65.
Proximal end of left humerus with head; fragment of frontal bone of skull and paramastoid portion; distal end of metacarpal-2; left radius-distal end. Proximal portion of femur without head; a head of femur; rib fragment; metatarsal-distal end; upper molar. From a late level of Period II.

KLB-1, locus-YF-2, Qd-2, stratum-2Z.
Left humerus-distal ends 2; medial and lateral condyle of humerus; right scapho-cuboid-2; left lower second and third molars; right patella; right calcaneum; fragment of right pelvis with a portion of acetabulum. From a late level of Period I.

KLB-1, locus-E-1, Qd-1, stratum-2, date 31.3.62.
Right humerus-distal end; left tibia-proximal fragment; broken lumbar vertebra; proximal fragment of left femur with head and trochanter major. From a late level of Period I.

KLB-1, locus-YF-2, Qd-2, stratum-2Y, depth-.30 to .65 cm., date 6.2.63.
Right patella-3; left patella-2; right lunate and scaphoid; left trapezoid and magnum. Right calcaneum; left scahpo-cuboid. From a late level of Period I.

KLB-1, locus-2A.2, stratum-14 X, date 15.12.62.
Third phalanx; right scaphoid; broken right metacarpal. From a middle level of Period II.

KLB-1, locus-XE-2, Qd-2, stratum-4, date 6.2.64.
Rib fragment; proximal fragment of left tibia of a young one. From a late level of Period II.

KLB-1, locus-XD-4, Qd-3.
Fragment of third phalanx. From an unstratified level.

KLB-1, locus-XF-2, Qs-2, stratum-4, depth-65 cm., date 12.12.63.
First phalanx. From a middle level of Period I.

KLB-1, locus-XE-1, Qd-3, stratum-6R and 7R.
First phalanx-2 (one broken). From a middle level of Period I.

KLB-1, locus-C-3, Qd-3, stratum-3, depth-78.
Left lateral maleollus. From a late level of Period II.

KLB-1, locus-XD-1, Qd-1, stratum-6 A.R.
Proximal fragment of left tibia; combined left trapezoid and magnum; left unciform; cuneiform; lunate; scaphoid. From an early level of Period I.

KLB-1, locus-XE-2, Qd-2, pit-5, date 7.2.64.
Broken right scapula-2; with glenoid cavity and one with coracoid process; first phalanx; lower left first and upper right third molars; fragment of upper right maxilla with second molar. From a late level of Period II.

KLB-1, locus-ZB-2, stratum-4.
Broken left patella. From a middle level of Period II.

KLB-1, locus-D-2, stratum-5.
First phalanx. From a middle level of Period II.

KLB-1, locus-D1-W4, stratum-6, date 7.4.62. Proximal fragment of a fright radius. From a middle level of Period I.

KLB-1, locus-XB-1, Qd-3, stratum-2, depth-30 cm., date 10.2.62.
First left lower molar; second, third right lower molars broken. From a late level of Period II.

KLB-1, locus-C8, Qd-4, stratum-3, depth-50 cm.
Fragment of right astragalus; broken left scapho-cuboid-2; right humerus-distal fragments; broken axis vertebra; cervical vertebra; second phalanx-1; third phalanx-3. From a late level of Period II.

KLB-1, locus-ZA-1, Qd-1, stratum-1 ml., date 27.12.62.
Sesamoid bone. From a late level of Period II.

KLB-1, locus-YC-2, Qd-4, stratum-3, depth-2.40 m., date 22.12.62.
First phalanx-1; and second phalanx-1; left astragalus; caudal vertebra. From a late level of Period II.

KLB-1, locus-XC-1, Qd-2, stratum-2B, depth-.05 m., date 3.1.63.
Proximal fragment of left ulna with olecranon process. From a late level of Period II.

KLB-1, locus-D-1, Qd-1 and 2, stratum-12, depth-2.30 m., date 3.3.63.
First phalanx-2; right tibia-distal fragment. From a middle level of Period II.

KLB-1, locus-XC-1, Qd-2, stratum-4A, depth-1.35 m., date 9.1.63.
Left astragalus. From a middle level of Period I.

KLB-1, locus-ZA-1, Qd-1, stratum-1, debris, depth-90 cm. - 1 m., date 27.12.62.
Left astragalus; first phalanx-1. From a late level of Period II.

KLB-1, locus-YC-2, Qd-3, stratum-2 dump layer, depth-0.90 cm., date 3.1.63.
First phalanx-1; right astragalus; caudal vertebra; distal fragment of right metatarsal; distal fragment of left femur without epiphysis. From a late level of Period II.

KLB-1, locus-XB-1, Qd-3, stratum-1.
Right astragalus; distal fragments of right metacarpal; proximal fragment of two left and distal fragment of one radius, first phalanx-1; third phalanx-2;. From a late level of Period II.

KLB-1, locus-ZD-2, stratum-3.
Distal fragment of right humers with medial and lateral condyles; left upper third molar; second phalanx-2; third phalanx-1; right radius-distal fragment; right metatarsal-distal fragment. From a late level of Period II.

KLB-1, locus-YF-12, Qd-3, stratum-dump sealed by layer-2, depth- 95 cm., date 4.1.65.
First phalanx-1; second phalanx-1; fragment of the shaft of right humerus; metatarsal-distal end fragment; rib fragment; fragment of the proximal part of radius; right tibia-distal end; fragment of the basilar part of occipital. From a late level of Period II.

KLB-1, locus-YF-12, Qd-4, date 7.1.65.
First phalanx-1; fragment of lower left second, third molars and upper right second molars. From an unstratified level.

KLB-1, locus-YA-8, Qd-2, stratum-5, date 5.3.65.
Fragment of head of right radius; broken left astragalus; horizontal ramus of mandible with right third molar; distal fragment of left radius andright radius; horizontal ramus of mandible with third pre-molar, first, second molars. From a late level of Period II.

KLB-1, locus-XD-1, Qd-1; pit-1 sealed by (5R), date 13.2.63.

Right calcaneum;-distal fragment; right femur; right humerus-distal fragment; atlas vertebra-body and thoracic vertebra-body; right radius-proximal fragment. From a middle level of Period I.

KLB-1, locus-XF-2, Qd-2, stratum-3, depth-35 cm., date 13.12.63.
Left femur-proximal fragment; fragment of horizontal ramus of left mandible with second and third pre-molars; fragment of the shaft of right ilium with portion of acctabulum; fragment of the shaft of right ilium. From a late level of Period II.

KLB-1, locus-ZA-1, Qd-4, foundation trench of well.
Third right molar of lower jaw; first phalanx-1; right astragalus; right scaphocuboid; right metacarpals-2 fragments. From a late level of Period II.

KLB-1, locus-XA-1.
Right astragalus. From an unstratified level.

KLB-1, locus-YF-2, Qd-3, stratum-5, depth-60 cm., date 5.1.63.
Left tibia-distal fragment; left lunate; fragment of a rib head and tubercle; two fragments of left sacphoid bone; left cuneiform; second phalanx. From a middle level of Period I.

KLB-1, locus-YA-1, Qd-1, baulk, date 30.12.62.
First phalanx; left cuneiform. From an unstratified level.
KLB-1, locus-YA-1, Qd-4, stratum-dump IB. depth 2.35 m, date 23.1.63.
Fragment of second lower molar; third lower molar. From an unstratified level.

KLB-1, locus-ZA-2, stratum-23 R, depth-5.50 to 5.60 m., date 5.2.63.
First phalanx. From an early level of Period II.

KLB-1, locus-XC-1, Qd-2, stratum-17, depth-4.65 m., date 31.1.63.
Left; femur-distal fragment. From an early level of Period II.

KLB-1, locus-YG-2, Qd-4, stratum-surface, date 9.2.63.
Broken left scapho-cuboid; large cuneiform. From an unstratified level.

KLB-1, locus-E-1, Qd-4, stratum-2.
Fragment of right metatarsal. From a late level of Period II.

KLB-1, locus-XB-1, Qd-3, stratum-4, depth-1.60 m.
Broken first phalanx. From a late level of Period II.

KLB-1, locus-XB, Qd-2, stratum-1, depth-1.90 m., date 5.2.63.
Left astragalus; first phalanx; proximal fragment of left femur. From a late level of Period II.

KLB-1, locus-YF-2, Qd-2, stratum-2Y.
Distal fragment of right scapula; first phalanx; distal fragment of right humerus-2. From a late level of Period I.

KLB-1, locus-XF-2, Qd-2, stratum-1, depth-30 cm.
Third phalanx. From a late level of Period I.

KLB-1, locus-XD-1, Qd-1, stratum-6AR.
Broken atlas vertebra-1; axis vertebra-1. From an early level of Period I.

KLB-1, locus-XB-5, Qd-1, stratum-4, date 1.2.62.
Fragment of tooth; left upper first, second, third molars and first; second pre-molar; fragment of right upper first molar. From a late level of Period II.

KLB-1, locus-XE-1, Qd-3, stratum-10E, depth-2.00 m.
Incissor teeth-5. From a middle level of Period II.

KLB-1, locus-ZC-8, Qd-2, stratum-12, depth-4.85 m., date 23.2.66.
Tibia-proximal end; broken vertebra; horn-core. From a middle level of Period II.

KLB-1, locus-ZCB, Qd-2, stratum-12, depth-2.85.
Broken vertebra; tibia-proximal end. From a middle level of Period II.

KLB-1, locus-ZD-8, Qd-1, stratum-BA, depth-59 cm., date 28.12.65.
Left and right calcaneum; fragment of left scapho-cuboid; second phalanx; left astragalus-2; fragment of mandible-4; upper first, second, third molars, third premolar and lower second molar. From a late level of Period II.

KLB-1, locus-ZA-8, Qd-4, date 5.2.65.
First phalanx-1, third phalanx-1; rib fragment; fragment of right calcaneum; distal fragment of metacarpal with epiphysis. From an unstratified level.

KLB-1, locus-ZC-6 ZC-7.-BX. stratum-7, depth-2 m., date 21.2.65.
First phalanx; rib fragment; right tibia-distal fragment; distal fragment and a shaft of right humerus. From a late level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-2, depth-2.30 cm., date 27.1.63.
Proximal fragment of rib with head, neck, tubercle; left upper first molar; first phalanx-2; second phalanx-1; fragment of third phalanx-1; fragment of seccral vertebra; lunate bone; right scapho-cuboid; left humerus-distal fragment. From a late level of Period II.

KLB-2, locus-9.16-2.30x, 9.17-9.20, stratum-2, depth-0.15 P.S., date 25.3.66.
First phalanx; proximal fragment of left metacarpal-3; metatarsal-1. From a late level of Period II.

KLB-2, locus-XA-17, Qd-4, stratum-3.
Ramus of mandible; body of vertebra. From an early level of Period II.

KLB-2, locus-XA-14, Qd-1, stratum-4, depth-0.55 cm., date 6.2.65.
Thoracic vertebra-1 fragment; right scaphoid; fragment of left ischium with a portion of glenoid cavity; second phalanx; distal fragment of metatarsal; right astragalus; fragment of left ilium. From a late level of Period II.

KLB-2, locus-XA-13, Qd-1, stratum-7, depth-1.50 cm., date 19.2.65.
First phalanx-1; second phalanx-1, fragment of third phalanx-1; fragment of thoracic vertebra and axis vertebra; proximal and distal fragment of left metacarpal; fragment of a rib with head and tubercle; fragment of the basial part of occipital bone; right tibia-proximal fragment. From a late level of Period II.

KLB-2, locus-XA-15, trench-2 and 3, stratum-7, depth-1.62 m., date 25.2.63.
Left trapezoid and magnum-2; right patella; right cuneiform; right trapezoid and magnum-1; metacarpal-distal fragment; first phalanx-5; second phalanx-2; third phalanx-2; right upper first, second, third, molars and two first, three third pre-molars. From a late level of Period II.

KLB-2, locus-XA-12, Qd-3, stratum-5, depth-1.20 m., date 21.1.65.
Second phalanx-3; fragment of the body of mandible; tibia; proximal fragment; left astragalus; body of thoracic vertebra-3; cervical vertebra-1; caudal vertebra-1. From a late level of Period II.

KLB-2, locus-XA-9, Qd-3, stratum-17, S.E., depth-3.35 mt., date 11.1.63.
Proximal and distal fragments of left tibia; right astragalus; first phalanx-2; left calcaneum; broken caudal vertebra; fragment of a rib with head, neck and tubercle; left cuneiform; lower incisor tooth; broken first right upper molar; fragment of horizontal ramus of left mandible with first and second molars. From an early level of Period II.

KLB-2, locus-XA-7, stratum-6, depth-1.40 cm., date 15.12.62.
Right humerus-distal fragment; right metacarpal-distal fragment; fragment of right calcaneum; first phalanx. From a late level of Period II.

KLB-2, locus-XB-8, stratum-2E, depth-0.30, date 27.12.62.
Proximal fragment of left radius (charred). From a late level of Period II.

KLB-2, locus-C-1, D-1, depth-0.40 m.
Second phalanx; fragment of caudal vertebra. From a late level of Period II.

KLB-2, locus-XA-6, stratum-18, depth-5.35 m., date 28.3.62.
First phalanx. From an early level of Period II.

KLB-2, locus-ZE-1, stratum-3W, date 22.2.62.
Caudal vertebra; broken accessory bone; left large cuneiform. From a late level of Period II.

KLB-2, locus-E-1, stratum-18.
Broken third phalanx. From an early level of Period II.

KLB-2, locus-XA-1, Qd-1, pit-2, stratum-2.
Second phalanx. From a late level of Period II.

KLB-2, locus-XA-6, stratum-11, depth-2.15 m., date 27.3.62.
Fragment of first and second lower molars. From a middle level of Period II.

KLB-2, locus-XA-6, stratum-5, depth-1.61 m., date 28.3.62.
Second phalanx. From a late level of Period II.

KLB-2, locus-E-1, stratum-21.
Fragment of right scapho-cuboid. From an early level of Period II.

KLB-2, locus-XA-8, S.W. sector, stratum-14, date 17.3.62.
First phalanx. From a middle level of Period II.

KLB-2, locus-XA-9, S.E. sector, stratum-13.
Proximal fragments of right radius; fragment of a rib with head and tubercle. From a middle level of Period II.

KLB-2, locus-B-7, Qd-3, stratum-12, date 20.2.64.
Distal fragment of left raius without epiphysis (of a young one). From a middle level of Period II.

KLB-2, locus-XB-9, Qd-1, depth-60 cm., stratum-3, date 31.1.67.
Fragment of epiphysis of metatarsal; metacarpal-distal fragment. From a late level of Period II.

KLB-2, locus-XA-7, Qd-1, stratum-1, depth-22 m.
Third phalanx; caudal vertebra-2; posterior fragment of right scapula with glenoid cavity. From a late level of Period II.

KLB-2, locus-XA-6, road-4, depth-1.09 m.
First phalanx-3; second phalanx-1; thoracic vertebra-2; caudal vertebra-1; right astragalus; left radius-proximal fragment; metacarpal-one proximal end; metacarpal-4 distal ends; one epiphysis of left metacarpal; fragment of left scapula with glenoid cavity and a portion of neck. From a late level of Period II.

KLB-2, locus-XA-6, stratum-17, depth-5.17.
First phalanx-1; second phalanx-1; left upper third molar and right upper second premolar; fragment of body of thoracic vertebra with spine; fragment of rib with head and tubercle. From an early level of Period II.

KLB-2, locus-XA-8, S.W. sector, stratum-15.
Fragment of horizontal ramus of left mandible with third molar; broken first phalanx.

From a middle level of Period II.

KLB-2, locus-XC-6, Qd-3, stratum-2, depth-.40 cm., date 25.2.63.
Distal fragment of metatarsal; left upper first and third molars, third pre-molar. From a late level of Period II.

KLB-locus-XB-9, Qd-1, stratum-2, depth-50 cm., date 24.1.63.
First phalanx-2; left astragalus; distal fragment of right tibia; body fragment of thoracic vertebra; distal fragment of metacarpal. From a late level of Period II.

KLB-2, locus-XA-9, stratum.
Distal fragment of left metatarsal. From an unstratified level.

KLB-2, locus-XA-9, N.W.S. stratum-5, date 13.2.62.
Broken right trapezoid and magnum. From a late level of Period II.

KLB-2, locus-XA-12, Qd-2, stratum-4, depth-75 - 90 cm., date 14.1.65.
First phalanx-1; second phalanx-2; right radius-distal fragment; fragment of right calcaneum; proximal end of scapula with glenoid cavity; left astragalus; distal ends of left humurus-3; distal end of right humerus-1; femur-2 fragment; fragment of metatarsal; metacarpal-distal end. From a late level of Period II.
KLB-2, locus-XA-8, Qd-1, stratum-2, depth-.25 m.
Right humerus. From a late level of Period II.

KLB-2, locus-XA-17, Qd-4, stratum-layer-2, depth-12.5. cm.
Broken lower jaw with second molar; right trapezoid magnum left astragalus-2; broken distal end of metatarsal; first and second molars in lower jaw. From an early level of Period II.

KLB-2, locus-XA-12, Qd-4, stratum-3, depth-10 cm., date 14.2.63.
First phalanx; fragment of lower left third premolar of young one; left upper third and second pre-molars. From a late level of Period II.

KLB-2, locus-XA-6, stratum-4, depth-1.65 m ., date 3.3.62.
Fragment of left pelvis; broken right metatarsal; right astragalus; right ascapho-cuboid and accessory bone. From a late level of Period II.

KLB-2, locus-XB-7, Qd-3, stratum-5, depth-1.80.
Fragment of spinous process-6, transverse process of vertebra-1; fragment of rib. From a late level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-2, depth-85 cm., date 31.1.63.
Broken right astragalus; left humerus-distal end; second phalanx; left calcaneum; distal fragments of large metatarsal with shaft. From a late level of Period II.

KLB-2, locus-XA-2, S.W. sector, pit-4, S.B.J. stratum-21.
Distal fragment of right tibia; right large cuneiform. From an early level of Period II.

KLB-2, locus-XA-8, S.W. stratum-2.
First phalanx. From a late level of Period II.

KLB-2, locus-XA-6, stratum-5, N.W. depth-1.86.
Third phalanx. From a late level of Period II.

KLB-2, locus-XA-9, N.W. sector, stratum-13, date 5.3.62.
Incisor tooth. From a middle level of Period II.

KLB-2, locus-XA-7, Qd-1, road-1, depth-1.60 m., date 27.2.62.
First phalanx-1; second phalanx-2; broken caudal vertebra. From a late level of Period II.

KLB-2, locus-XA-6, stratum-8, depth-2.68 m.

Fragment of rib with tubercle. From a middle level of Period II.

KLB-2, locus-ZE-1, stratum-1A.W. date 27.2.62.
Fragment of right astragalus; fragment of a rib with tubercle. From a late level of Period II.

KLB-2, locus-XA-8, Qd-1, stratum-8, depth-1.85 m., date 23.12.62.
Left calcaneum; right large cuneiform; broken second left lower molar. From a middle level of Period II.

KLB-2, locus-XA-9, stratum-21, depth-3.65 m., date 25.3.62.
First phalanx. From an early level of Period II.

KLB-2, locus-XA-1, stratum-9, date 9.4.62.
Fragment of the vertical ramus of mandible of left side with broken condyle. From a middle level of Period II.

KLB-2, locus-XA-6, road-2, depth-.85 m.
Fragment of right calcaneum. From a late level of Period II.

KLB-2, locus-XA-7, Qd-1, stratum-14, depth-3.75.
First phalanx-1 fragment; third phalanx-1. From a middle level of Period II.
KLB-2, locus-XA-9, S.W. sector, stratum-12.
Fragment of a rib. From a middle level of Period II.

KLB-2, locus-XA-9, Qd-3, stratum-19 S.E.
Proximal fragment of metacarpal. From an early level of Period II.

KLB-2, locus-XA-8, stratum-22, S.W. sector.
Proximal and distal end of left radius; three left and one right fragments of scapula with glenoid cavity; fragment of third phalanx; right tibia-distal fragment of right pelvic bone with acetabulum; broken right astragalus; right humerus-distal fragment; distal epiphysis of left femur; broken left metacarpal. From an early level of Period II.

KLB-2, locus-XC-9, Qd-4, stratum-2, depth-0.55 m., date 6.2.63.
First phalanx-1; second phalanx-2. From a late level of Period II.

KLB-2, locus-XB-7, Qd-3, stratum-7S, depth-1.80 m., date 2.2.63.
Fragment of calcaneum; fragment of skull; premaxilla; maxilla and molar bone. From a late level of Period II.

KLB-2, locus-XA-17, stratum-9, date 22.2.62.
First phalanx-1; second phalanx-1; fragment of right unciform; two large cuneiform. From a middle level of Period II.

KLB-2, locus-XA-8, Qd-3 stratum-9 depth-2.20 m.
Fragment of right calcaneum. From a middle level of Period II.

KLB-2, locus-XA-6, stratum-5 depth-1.42 m., date 25.2.62.
Fragment of left scapula with glenoid cavity; right metacarpal-distal fragment. From a late level of Period II.

KLB-2, locus-XB-9, Qd-4, stratum-20 and 21, depth-3.70 m., date 3.1.63.
Fragment of the horizontal ramus of left mandible. From an early level of Period II.

KLB-2, locus-XA-6, stratum-20, depth-6.40 m.
Thoracic vertebra-3; axis vertebra-1; lumber vertebra-1; fragment of horn core; second phalanx-1; third phalanx-1; fragment of the body of mandible ; distal fragment of right humerus with lateral and medial condyles; fragment of rib with head; neck and tubercle; fragment of right third molar; right metatarsal-distal fragment; right tibia-distal fragment. From an early level of Period II.

KLB-2, locus-XA-7, Qd-1, road-2, depth-98 cm.
First phalanx-1; two second phalanx-1; and third phalanx-1; fragment of a rib with head and tubercle; broken right scapho-cuboid; right large cuneiform. From a late level of Period II.

KLB-2, locus-XA-7, Qd-1, stratum-6, depth-1.00 m.
First phalanx-1; third phalanx-1; left calcaneum-2; right astragalus. From a late level of Period II.

KLB-2, locus-XA-6, road-4, depth-1.12 m., date 23.2.62.
Fragment of sacrum, atlas and axis vertebra; two fragments of right scapula with glenoid cavity; first phalanx-1; second phalanx-2; right metacarpal-proximal fragment; left metatarsal-proximal fragment right humerus-distal fragment; left radius-proximal fragment; fragment of rib with head, Neck and tubercle. From a late level of Period II.

KLB-2, locus-XA-6, road-6, depth-97 cm.
First phalanx-2; left astragalus. From a late level of Period II.

KLB-2, locus-XA-6, road-6, depth-5.80 m.
First phalanx; metacarpal - distal fragment; fragment of left scapula with glenoid cavity. From an early level of Period II.

KLB-2, locus-XA-6, stratum-20, depth-5.80 m.
Right astragalus - 1; left astragalus-1 broken; cervical vertebra-3; broken lumber vertebra - 1; first phalanx ; left tibia-proximal fragment. From an early level of Period II.

KLB-2, locus-XA-6, stratum-17, depth-4.97 m., date 26.3.62.
Fragment of left and right astragalus; body of thoracic vertebra-1; caudal vertebra-1; distal fragment of left and right metatarsal; fragment of a rib with head and tubercle; proximal fragment of right scapula with glenoid cavity-2; broken right lower third molar; proximal fragment of left sapula-1; fragment of left calcaneum; left radius-distal fragment; fragment of left ulna. From an early level of Period II.

KLB-2, locus-XA-6, stratum-14, depth-4.42. m.
First phalanx; fragments of rib with head, neck and tubercle-2; right metatarsal-distal fragment, left metatarsal-distal fragment. From a middle level of Period II.

KLB-2, locus-E-1, stratum-21.
Distal fragment of right radius; third phalanx; fragment of a rib with head, neck and tubercle; thoracic vertebra; right patella; left astragalus-2. From an early level of Period II.

KLB-2, locus-XA-6, stratum-12, depth-3.69 m.
Right calcaneum-1; fragment; left calcaneum-1 fragment; fragments of cervical vertebra; distal fragment of left metacarpal; fragment of rib with head and neck. From a middle level of Period II.

KLB-2, locus-XA-9, stratum-13.
Fragment of left lower second molar and third molar; distal fragment of right humerus-3; distal fragment of left humerus-1; first phalanx-2; second phalanx-2; distal fragment right radious-1; distal fragment of left raidus-1; fragment of left calcanuem-2; right calcaneum-1; fragment of vertical ramus of left mandible with condyle; distal fragment of left metacarpal; fragment of right pelvis with a portion of acetabulum; posterior fragment of right scapula with a portion of glenoid cavity. From a middle level of Period II.

KLB-2, locus-XA-6, stratum-5, depth-1.20 m.
Fragment of ribs with head and tubercle-2; first phalanx-2; second phalanx-1; third phalanx-1; caudal vertebra-2; left tibia-distal fragment; left metatarsal-proximal fragment.

From a late level of Period II.

KLB-2, locus-XA-7, stratum-22, depth-6.10 m., date 18.3.62.
Distal fragment right metacarpal-2; right lunate; distal fragment of right metatarsal-1; atlas vertebra; first phalanx-2; left humerus-distal fragment; fragment of right scapula with glenoid cavity. From an early level of Period II.

KLB-2, locus-XA-7, Qd-4, stratum-12, depth-2.65 m., date 5.3.62.
Left lunate; fragment of right upper third molar; proximal fragment of right radius-1; distal fragment of right radius-1; distal fragment of left radius; right humerus-distal fragment. From a middle level of Period II.

KLB-2, locus-B-7, Qd-4, stratum-2 and 3, date 17.2.63.
Large cuneiform. From a late level of Period II.

KLB-2, locus-XA-9, Qdt-1, stratum-13, depth-2.15 m., date 6.1.63.
First phalanx-1; second phalanx-1; caudal vertebra. From a middle level of Period II.

KLB-2, locus-XA-9, Qd-3 and 4, stratum-19, depth-3.40 m., date 18.1.63.
Broken first right upper molar; right scaphoid; distal fragment of right metacarpal. From a middle level of Period II.

KLB-2, locus-XA-3, Qd-3, stratum-16, depth-3.25 m., date 28.3.62.
Right left astragalus-1; right astragalus-2; second phalanx-3; broken left horn-core; right scapho-cuboid bone; lumber vertebra-1 fragment; cervical vertebra-1 fragment; distal fragment right tibia; distal fragment of left tibia; fragment of right scapula with glenoid cavity; fragment of rib with head and tubercles-2; fragment of horizontal ramus of right mandible with first and second molar. From a middle level of Period II.

KLB-2, locus-XA-7, Qd-4, stratum-12, depth-3.35 mm.
First phalanx. From a middle level of Period II.

KLB-2, locus-XB-7, Qd-3, stratum-3N, depth-0.50 m., date 6.2.65.
Fragment of horizontal ramus of left mandible with third molar. From a late level of Period II.

KLB-2, locus-XA-6, road-11, depth-1.4 m., date 28.2.63.
Broken caudal vertebra-1; lumber vertebra-1; right astragalus; right tibia-distal fragment. From a late level of Period II.

KLB-2, locus-E-1, Qd-1, stratum-20, depth-3.57 m., date 1.3.62.
Right metacarpal-distal fragment; left metacarpal-distal fragment; first phalanx; broken right scapho-cuboid. From an early level of Period I.

KLB-2, locus-C-7, Qd-4, stratum-6, depth-1.30 m., date 19.1.64.
Second phalanx; fragment of vertical ramus of left mandible with condyle; metacarpal-distal fragment; fragment of left pelvis with a portion of acetabulum; fragment of left calcaneum; fragment of right astragalus; fragment of left scapula with a portion of glenoid cavity. From a late level of Period II.

KLB-2, locus-B-7, Qd-3, stratum-10, depth-2050 m., date 25.12.62.
Left patella; right scapho-cuboid. From a middle level of Period II.

KLB-2, locus-C-7, Qd-4, stratum-6, depth-1.5 m., date 12.1.63.
Fragment of horn; fragment of mandible; third phalanx; left lower third molar. From a late level of Period II.

KLB-2, locus-XB-8, Qd-2, stratum-4, depth-1.65 m., date 1.1.63.

First phalanx-3; incisor tooth-2; right astragalus; broken thoracick vertebra-1; caudal vertebra-1. From a late level of Period II.

KLB-2, locus-XA-9, Qdt-1, stratum-14, depth-2.40 m., date 6.1.63.
Accessory bone; left cuneiform; fragment of axis vertebra. From a middle level of Period II.

KLB-2, locus-XB-7, Qd-3, stratum-8S, depth-1.90 m., date 5.2.63.
Distal fragment of left humerus with medial and lateral condyles; proximal fragment of right metacarpal; third phalanx-2; left patella; right scapho-cuboid; distal fragment of right metacarpal. From a middle level of Period II.

KLB-2, locus-XB-7, Qd-3, stratum-7S, depth-1.80 m., date 23.1.63.
Second phalanx-3; third phalanx-1; right patella; right unciform; left scaphoid bone; lunate; distal fragment of right radius; distal fragment of scapula comprising of glenoid cavity. From a late level of Period II.

KLB-2, locus-ZE-1, stratum-2 W, date 28.2.62.
Third phalanx; sesamoid bone. From a late level of Period II.

KLB-2, locus-XA-9, stratum-15, depth-2.85 m., date 8.1.68.
Fragment of left pelvis of a young one without epiphysis. From a middle level of Period II.

KLB-2, locus-XA-17, Qd-4, stratum-2, depth-13 cm.
Broken right astragalus; right scapho-cuboid and large cuneiform; fragment of right calcaneum; distal end of left femur; broken right metatarsal. From a late level of Period II.

KLB-2, locus-X4-17, Qd-4, stratum-1, depth-1.20 m., date 1.2.66.
Horn core; fragment of the distal end of tibia. From a late level of Period II.

KLB-2, locus-D-9, Qd-2, stratum-9, depth-1.83 m.
Right calcaneum; fragment of axis vertebra; fragment of right first molar. From a middle level of Period II.

KLB-2, locus-D9, Qd-3, stratum-4, depth-90 cm., date 19.1.64.
Second phalanx. From a late level of Period II.

KLB-2, locus-D9, Qd-2, stratum-11, depth-3.00 m.
Second phalanx. From a middle level of Period II.

KLB-2, locus-XA7, Qd-3, stratum-11, depth-2.95 m., date 26.2.63.
Right radius-proximal end. From a middle level of Period II.

KLB-2, locus-E-1, stratum-20.
Right astragalus-1; left astragalus-1; first phalanx-1; second phalanx-1; fragment of atlas, vetebra-1; thoracic vertebra-1; caudal vertebra-1; distal fragment of right femur-1; distal fragment of left femur-2; left scapho cuboid; right trapezoid and magnum; fragment of left pelvis with a portion of acetabulum and pubis. From an early level of Period II.

KLB-2, locus-C-7, Qd-4, stratum-7, depth-1.35 m., date 14.1.64.
Horn-core-3, fragments; first phalanx-1; second phalanx-1; broken third phalanx-1; left astragalus (broken)-1; right astragalus-2; proximal epiphysis or right tibia. From a late level of Period II.

KLB-2, locus-C-7, Qd-2, stratum-4, depth-1.50 m., date 21.1.64.
Fragment of ribs; fragment of left calcaneum; right femur-distal fragment. From a late level of Period II.

KLB-2, locus-D-8, Qd-3, stratum-15, depth-2.65 m.
Proximal fragment of left tibia; atlas verte-

bra-1; axis vertebra-1; cervical vertebra-2. From a middle level of Period II.

KLB-2, locus-D-9, Qd-2, stratum-9, depth-1.83 m.
Left metatarsal; right humerus-proximal fragment. From a middle level of Period II.

KLB-2, locus-B-7, Qd-3, stratum-10, depth-3.00 m.
Proximal fragment of left ulna with semilunar notch. From a middle level of Period II.

KLB-2, locus-XE-6, Qd-2, stratum-2, depth-30 cm., date 16.1.63.
Right metatarsal-proximal fragment; right large cuneiform; right scapho-cuboid; right tibia-distal fragment. From a late level of Period II.

KLB-2, locus-D-9, Qd-2, stratum-9 depth-1.83 m., date 24.1.64.
First phalanx-1; second phalanx-1; right cuneiform-2. From a middle level of Period II.

KLB-2, locus-XA-6, stratum-17, depth-5.17 m.
Right metatarsal-distal fragment; left tibia-distal fragment; left metacarpal-distal fragment. From a middle level of Period II.

KLB-2, locus-C-9, Qd-3, stratum-4A, depth-.99 cm., date 9.1.64.
Broken right astragalus. From a late level of Period II.

KLB-2, locus-E8, Qd-4, stratum-2.
Caudal vertebra. From a late level of Period II.

KLB-2, locus-B-7, Qd-3, depth-2.50 m.
First phalanx. From a late level of Period II.

KLB-2, locus-B-7, Qd-3, stratum-7, depth-1.80 m.
First phalanx-1; second phalanx-2; broken left scaphoid; fragment of the body of the right premaxilla. From a late level of Period II.

KLB-2, locus-XA-10, Qd-1, stratum-4, depth-0.75 m., date 2.1.65.
Horn-core; fragment of left astragalus; fragment of distal end of metatarsal; left tibia-distal fragment; femur-distal end; metatarsal- fragment; second phalanx-1; third phalanx-1; humerus-distal end; fragment of a rib. From a late level of Period II.

KLB-2, locus-XA-17, Qd-4, stratum-2, depth-13 cm.
First phalanx; fragment of left scapho cuboid; left metatarsal. From a late level of Period II.

KLB-2, locus-B-6, Qd-3, stratum-6, date 20.1.65.
Distal fragment of metacarpal with condyles; right upper three first and four second molars; first pre-molar; left upper-two first molar and a third premolar; fourth premolar; left lower three second pre-molar; right lower first molar; right upper five, third pre-molar; left patella bone. From a late level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-6, depth-1.58 m., date 1.2.65.
Right pubis of pelvic bone with a portion of acetabulum; fragment of left scapula with glenoid cavity; left trapezoid and magnum; fragment of left astragalus; proximal fragment of right femur with a portion of head; distal fragment of metacarpal; first phalanx (with a cut mark); broken upper molar; fragment of lateral condyle of left femur; fragment of the body of sacrum; fragment of rib with head. From a late level of Period II.

KLB-2, locus-E-3, Qd-1, stratum-2, depth-80 cm., date 4.2.63.
First phalanx-3; fragment of axis vertebra-1; cervical vertebra-1; upper right first and third molar; fragment of frontal bone; fragment of horn-core; distal fragment of right humerus-1; distal fragment of left humerus-1; fragment of left astragalus; distal fragment of metatarsal; distal fragments metatarsal-1; proximal fragment of metacarpal-2; right

scapula with glenoid cavity-2. From a late level of Period II.

KLB-2, locus-XA-6, stratum-5, depth-1.80 cm., date 5.3.62.
First phalanx; right tibia-proximal fragment; shaft of left tibia; left first and second molars and third premolar. From a late level of Period II.

KLB-2, locus-E-3, Qd-4, D-3-Qd-3, stratum-2, date 14.2.65..
First phalanx. From a late level of Period II.

KLB-2, locus-E-1, stratum.
Fragment of right pelvis. From an unstratified level.

KLB-2, locus-E-1, Qd-1, stratum-32, depth-8.95 m., date 17.3.62.
Fragment of the shaft of right femur; right metacarpal-distal fragment. From an early level of Period II.

KLB-2, locus-XA-1, Qd-1, stratum-24, date 31.3.62.
Fragment of zygometic bone of right side. From an early level of Period II.

KLB-XA-9, stratum-10, depth-1.43 m.
Broken right lower jaw with first and third molar. From a middle level of Period II.

KLB-2, locus-XA-13, stratum-4, depth-1.65 m., date 15.2.65.
Fragment of body of vertebra; fragment of right ulna with a portion of semilunar notch; lateral condyle of left femur; fragment of left scapula with glenoid cavity. From a late level of Period II.

KLB-2, locus-XA-17, stratum-13, date 8.2.62.
Right astragalus; right metacarpal-distal fragment; fragment of a rib with head, neck and tubercle-2; right scaphoid; sesamoid bone; broken right scapho-cuboid. From a middle level of Period II.

KLB-2, locus-XA-6, stratum-4X, depth-1.32 m., date 5.12.62.
Lumbar vertebra-2; thoracic vertebra-1; broken candal vertebra-1; first phalanx-1; second phalanx-2; left humerus-distal fragment; fragment of rib with head, neck and tubercle; fragment of right scapula with glenoid cavity. From a late level of Period II.

KLB-2, locus-XA-17, Qd-4, stratum-3, depth-13 cm.
Right humerus-proximal end; right femur. From a late level of Period II.

KLB-2, locus-XA-13, Qd-3, stratum-9, date 17.2.65.
First phalanx; proximal fragment of right femur with head; right humerus-distal fragment. From a middle level of Period II.

KLB-2, locus-XA-15, Qd-3, stratum-5, date 12.2.65.
Broken right astragalus-1; left astragalus-1; right lunate; first phalanx-2; body fragments of thoracic vertebra-2; distal fragment of right femur-1; proximal fragment of right femur-1; distal fragment of metacarpal-2; metatarsal-1; fragment of a rib with head and tubercle; left trapezoid and magnum. From a late level of Period II.

KLB-2, locus-XA-12, Qd-4, stratum-4, depth-1.12 m., date 18.2.65.
Fragments of lumbra vertebra-2; cervical vertebra-2; axis vertebra-2; upper right second molar (broken) and third pre-molar; fragment of head of femur. From a late level of Period II.

KLB-2, locus-XA-15, trench 2 and 3, depth-1.02 m., date 27.2.65.
Fragment of vertical ramus of mandible with condyle-2; left astragalus; first phalanx; fragments; of condyles of right humerus; fragment of rib with head and tubercle; proximal fragment of right metacarpal; fragment of atlas vertebra-2; body of thoracic vertebra-1. From a late level of Period II.

KLB-2, locus-XA-12, Qd-4, stratum-2, depth-40 cm., date 12.2.65.
Left calcaneum; fragment of shaft of metatarsal; proximal fragment of rib-2; mandible with second and third left molar and second right molar. From a late level of Period II.

KLB-2, locus-XA-10, Qd-2, stratum depth-0.85, date 21.1.64.
Left humerus-distal fragment; left astragalus; first phalanx-1; second phalanx-1. From a late level of Period II.

KLB-2, locus-B-6, Qd-4, stratum-9, date 8.3.58.
Broken shaft of humerus. From a middle level of Period II.

KLB-2, locus-B-6, Qd-4, stratum-2, date 2.1.65.
Fragment of a rib; right radius-distal end; upper first and second molars. From a late level of Period II.

KLB-2, locus-XB-7, Qd-3, stratum-7S, depth-1.80 m., date 2.2.63.
Right astragalus. From a late level of Period II.

KLB-2, locus-ZB-16, stratum-3, depth-1.30 m.
Broken atlas vertebra; distal end of right humerus with condyle. From a late level of Period II.

KLB-2, locus-XA-10, Qd-3, stratum-4, depth-0.75 m.
Upper pre-molar; left first, second and third molars. From a late level of Period II.

KLB-2, locus-XA-10, Qd-2, stratum-3, depth-0.75 m., date 26.12.65.
Right lower first molar; first humerus-distal fragment. From a late level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-2, depth-42 cm., date 28.1.63.
First phalanx-1; second phalanx-1; third phalanx-1; left calcaneum; left unciform; lower incisor tooth; upper right, first, second, third molars and first, second, pre-molar, lower right second and third inolars a lower right third premolars; proximal end of left meatarsal-2. From a late level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-3, depth-1.05 m., date 2.2.65.
Fragment of left and right calcaneum; left radius-proximal end. From a late level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-5, depth-1.35 m., date 5.2.65.
Axis vertebra-1; thoracic vertebra-1; distal end of right metacarpal; fragment of head of right humerus; fragment of right calcaneum. From a late level of Period II.

KLB-2, locus-XA-12, Qd-2, stratum-6, depth-1.20 m., date 16.2.62.
Metacarpal- distal end. From a late level of Period II.

KLB-2, locus-XA-10, Qd-1, pit-A. sealed b y (8) depth-.75 m.
Fragment of rib. From a late level of Period II.

KLB-2, locus-XA-13, Qd-1, stratum-2, depth-65 cm., date 9.2.65.
Metacarpal-distal end; tibia-distal end; fragment of pubis bone; left radius-distal end; metatarsal-proximal end; second phalanx; fragment of rib-2; left scaphocuboid; right astragalus-1; left astragalus-1; left calcaneum; head of humerus-4 fragments. From a late level of Period II.

KLB-2, locus-YA-15, trench 2 and 3, stratum-7, depth-1.6 m., date 25.2.65.
Horn core; first and second upper molars; primary pre-molar of upper jaw. From a late level of Period II.

KLB-2, locus-XA-15, Qd-3, stratum-3, depth-.80 m., date 10.2.65.

Right calcaneum; first phalanx; second phalanx; coccydeal vertebra; distal end of metacarpl-2. From a late level of Period II.

KLB-2, locus-XA-17, Qd-4, stratum-2, depth-13.5 m.
Distal end of right radius-1; proximal end of right radius-2; right scapho-cuboid; broken right calcaneum-1; left calcaneum-2; distal end of right tibia-1; distal end of left tibia-1; distal end shaft of right humerus-1; head of left humerus-1; right astragalus; metatarsal-proximal end of scapula with glenoid cavity; left unciform; broken second phalnx-2; distal end of right humerus with condyle; lower left third molar; fragment of rib; left cuneiform; left scaphoid; broken body of lumbar vertebra; caudal; vertebra-1. From a late level of Period II.

KLB-2, locus-XA-6, stratum-16, depth-4.75 m., date 26.3.62.
Distal fragment of left humerus -2; left astragalus; right scaphoid; third phalanx-1; first phalanx-1; right metatarsal. From a middle level of Period II.

KLB-2, locus-M-8, Qd-1 and 2, stratum-4, depth-1.18 m., date 20.2.66.
First phalanx-1; second phalanx; distal end of metatarsal-1; proximal end of metatarsal-2; left radius-distal end. From a late level of Period II.

KLB-2, locus-XA-17, Qd-4, stratum-2.
Left astragalus-2; second phalanx-2; left calcaneum; left scapho-cuboid; distal end of left tibia. From a late level of Period II.

KLB-2, locus-XA-15, Qd-2 and 3, stratum-7, depth-1.62. m., date 25.2.66.
Left lunate; proximal end shaft of right tibia-2; left femur-proximal end. From a late level of Period II.

KLB-2, locus-XA-17, stratum-2, depth-13 cm.
Left femur-proximal end; left metatarsal-distal end. From a late level of Period II.

KLB-2, locus-XA-2, Qd-4, sratum-6, depth-1.65. m., date 2.2.65.
First phalanx-1; second phalanx-1; third phalanx-1; broken axis vertebra; broken right lunate; upper right second and third molar; lower right molar. From a late level of Period II.

KLB-2, locus-XA-13, Qd-1, stratum-4, depth-1.02 cm., date 14.2.65.
First phalanx-1; third phalanx-1; left scapho-cuboid; left cuneiform; broken right calcaneum. From a late level of Period II.

KLB-2, locus-ZE-2, stratum-3.
Horn core. From a late level of Period II.

KLB-2, locus-ZA-6, Qd-1, stratum-1.
First phalanx. From a late level of Period II.

KLB-2, locus-XA-2, stratum-8, depth-1.35 m., date 9.3.65.
Right astragalus; left upper first, second and lower second molars; right upper, first second and third molars. From a late level of Period II.

KLB-2, locus-XA-17, Qd-4, stratum-2, depth-1.35.
Body of lumbar vertebra; right astragalus-4; fragment of the body of vertebra; ramus of mandible; tibia-distal fragment; metatarsal-proximal fragment; metatarsal-distal fragment; fragment of distal end of ilium (pelvic girdle); right trapezoid magnum; right lunate; left and right scaphoid; broken unciform. From a late level of Period II.

KLB-2, locus-XA-17, Qd-4, stratum-2, depth-12.5.
First phalanx-3; second phalanx-1; third phalanx-2; right metacarpal-distal fragment; left metacarpal-distal fragment; proximal fragment of right calcaneum; right metatarsal-proximal end; left metatarsal-proximal end; trapezoid and magnum-2; left humerus-

distal end; scapula with glenoid cavity. From a middle level of Period II.

KLB-2, locus-A-6, Qd-3, stratum-6, date 21.2.68.
Fragment of a rib; third phalanx; right astragalus; proximal end of metacarpal; head of femur. From a late level of Period II.

KLB-2, locus-B-8, Qd-2, stratum-17, depth-4.60 m.
Left lower, first, second, third molar; third pre-molar; upper third molar; right metacarpal. From a middle level of Period II.

KLB-2, locus-C-6, Qd-3, stratum-3.
Ramus of mandible; left scapho cuboid-2; thoracic vertebra-3; atlas vertebra-1. From a late level of Period II.

KLB-2, locus-XA-12, Qd-4, stratum-3, depth-90 cm., date 15.2.65.
Fragment of rib-3; second phalanx-1; third phalanx-1; fragment of first phalanx-1; ramus of mandible; proximal end of left radius; fragment of lumbar vertebra; metacarpal-distal end. From a late level of Period II.

KLB-2, locus-XA-12, Qd-4, stratum-2, depth-25 cm., date 10.2.65.
Distal ends of metatarsal-3; left and right scapho-cuboid; first phalanx-1; third phalanx-1; fragment of right astragalus; left calcaneum-2 fragment; right calcaneum-1. From a late level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-3, date 29.1.65.
First phalanx; metacarpal proximal end; metatarsal proximal end; radius-proximal end. From a late level of Period II.

KLB-2, locus-XA-12, Qd-2, stratum-4, depth-1 m. - 1.10 m.
Astragalus; broken first phalanx; broken left calcaneum. From a late level of Period II.

KLB-2, locus-E-2, Qd-4, date 30.1.65.
Upper third molar; distal end of left radius with condyle. From a late level of Period II.

KLB-2, locus-XA-12, Qd-2.
Second phalanx-2. From an unstratified level.

KLB-2, locus-XA-12, Qd-1, stratum-2, depth-66 cm., date 24.1.65.
Second upper molar. From a late level of Period II.

KLB-2, locus-XA-10, Qd-3, stratum-4, depth-0.75 m.
Left calcaneum. From a late level of Period II.

KLB-2, locus-XA-17, Qd-4, depth-4.70 m., date 4.2.60.
First phalanx-1; second phalanx-1; fragment of mandible with condyle and coronoid process. From a late level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-3, depth-85 cm., date 31.1.65.
Scaphoid; fragment of rib; broken right astragalus; fragment of axis vertebra; broken calcaneum; first phalanx-1; second phalanx-1. From a late level of Period II.

KLB-2, locus-XA-13, Qd-1, stratum-3, depth-1 m., date 13.2.65.
First phalanx-1; cervical vertebra-1; metacarpal-distal end. From a late level of Period II.

KLB-2, locus-XA-15, Qd-1, stratum-3, depth-1.50 m., date 26.12.65.
Left broken calcaneum; fragment of the rib; right astragalus; shaft of metatarsal; left radius-proximal end. From a late level of Period II.

KLB-2, locus-XA-15, Qd-1, stratum-2, depth-0.15 B.S., date 5.2.65.
Third phalanx-1, large cuneiform; fragment of ramus of mandible; lateral malleolus; second phalanx-1; first phalanx-2; right metacarpal. From a late level of Period II.

KLB-2, locus-XA-12, Qd-4, stratum-5, depth-1.18 m., date
Lumbar vertebra-6; cervical vertebra-2. From a late level of Period II.

KLB-2, locus-XA-15, Qd-3, top of layer-4, depth-1 m., date 10.2.65.
Left calcaneum; left astragalus; second phalanx-5; first phalanx-4; distal end of metatarsal. From a late level of Period II.

KLB-2, locus-XA-16, Qd-1, stratum-2, depth-1.60 m., date 25.2.65.
One proximal and two distal end of metacarpal; glenoid cavity of scapula. From a late level of Period II.

KLB-2, locus-XA-15, Qd-3, stratum-3, depth-80 cm., date 10.2.65.
Second phalanx-1; first phalanx-2; metatarsal-distal end 2; distal end of a metacarpal; ramus of mandible; fragment of the body of vertebra; right scaphoid. From a late level of Period II.

KLB-2, locus-XA-17, Qd-4, stratum-2.
Lunate; left and broken right astragalus; upper left first, second molar and second premolar; scaphocuboid-2; left large cuniform; first phalanx-4; second phalanx-2; fragment of distal end of radius. From a late level of Period II.

KLB-2, locus-XB-18, Qd-2, stratum-5, depth-60 cm., date 15.2.63.
Right astragalus-4 (1broken); left astragalus-1; left calcaneum; first phalanx-3; second phalanx-1; left scaphocuboid; left large cuneiform. From a late level of Period II.

KLB-2, locus-XA-11, Qd-1, stratum-3, depth-0.9 cm., date 30.10.65.
Trapezoid magnum; scaphoid-2; right cuneiform; pre-molar (young one) third upper molar; right unciform. From a late level of Period II.

KLB-2, locus-XA-10, Qd-4, stratum-7, depth-1.30, date 6.1.65.
Fragment of right maxilla with second and third molars; fragment of right astragalus; fragment of right trapezoid and magnum (charred). From a late level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-5, depth-1.40 m., date 1.2.65.
Proximal fragment of right tibia; first phalanx-1; second phalanx-1. From a late level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-2, date 24.1.64.
Second phalanx; fragment of the body of vertebra. From a late level of Period II.

KLB-2, locus-XA-12, Qd-3, stratum-3, depth-60 cm., date 22.1.65.
Left astragalus; second phalanx-1; first phalanx-1; fragment of atlas vertebra; fragment of distal end of left femur. From a late level of Period II.

KLB-2, locus-XA-13, Qdt-1, stratum-4, depth-1.02 cm., date 14.2.65.
Body fragment of thoracic vertebra; distal fragment of metatarsal; right astragalus. From a late level of Period II.

KLB-2, locus-C-6, Qd-1, stratum-2, depth-7 cm., date 2.1.65.
Broken unciform bone. From a late level of Period II.

KLB-2, locus-XA-8, S.E. sector, stratum-25, depth-4.40 m., date 2.1.63.
Right calcaneum-21; left calcaneum-2; proximal fragment of left and right radius; left astragalus-2; second phalanx-1; right trapezoid and magnum; right radius-proximal fragment; left scapho-cuboid; right patella (broken); fragment of shaft of right ilium; fragment of right scapula with glenoid cavity. From an early level of Period II.

KLB-2, locus-XA-9, S.E. sector, stratum-10, date 17.2.62.

First and second phalanx - left lunate; scaphoid; left astragalus; thoracic vertebra; distal fragment of metacarpal; fragment of left pelvis with a portion of acctabulum; distal fragment of left tibia; proximal fragment of left radius. From a middle level of Period II.

KLB-2, locus-XA-9, stratum-23.
Distal fragment of left radius; broken lumbar vertebra-1; thoracic vertebra-1; fragment of the horizontal ramus of left mandible; fragment of left scapula with glenoid cavity; third phalanx; right calcaneum. From an early level of Period II.

KLB-2, locus-XA-6, stratum-14.
Right femur-2 fragments; right astragalus; right scapho-cuboid; right metatarsal; trapezoid and magnum; left scaphoid. From a middle level of Period II.

KLB-2, locus-XA-15, Qd-2 and 3, stratum-7, depth-1.62 m., date 25.2.65.
Right astragalus-1; left astragalus-1; right calcaneum-2; first upper molar; scaphoid; right scapho-cuboid; distal end of right metacarpal; four broken lumbar vertebra; thoracic vertebra-3. From a late level of Period II.

KLB-2, locus-XA-11, Qd-1, stratum-3, date 30.12.64.
Fragment of the distal portion of left radius; fragment of rib. From a late level of Period II.

KLB-2, locus-XD-6, Qd-1, stratum-3.
Fragment of left scapula. From a late level of Period II.

KLB-2, locus-D-9, Qd-2, stratum-9, depth-1.8 m.
Left scapula; second left upper pre-molar. From a middle level of Period II.

KLB-2, locus-XA-15, Qd-2 and 3, stratum-7, depth-1.62 m., date 21.2.65.
Fragment of the body of thoracic and cervical vertebra and lumbar vertebra; proximal fragment of right tibia and left tibia and distal end of left two tibia; altas vertebra-1; cervical vertebra-1; fragment of body of vertebra. From a late level of Period II.

KLB-2, locus-XA-15, Qd-2, stratum-2, depth-7.30 m., date 6.2.65.
First phalanx-2; second phalanx-2; third phalanx-2; left scaphoid-2; left astragalus; distal fragment of left metacarpal. From a late level of Period II.

KLB-2, locus-XA-10, Qd-1, stratum-4, depth-75 cm., date 2.10.65.
Fragment of axis vertebra; lumbar vertebra; thoracic vertebra-2; right astragalus-1; left astragalus-1; broken; fragment of left ulna; horn-core; fragment of rib; fragment of patella; proximal fragment of left femur; first phalanx-2; right humerus-distal fragment; fragment of scapula with a portion of right glenoid cavity; right lower third molar; distal fragment of left radius; distal fragment of right tibia. From a late level of Period II.

KLB-2, locus-XA-12, Qd-2, stratum-5, depth-1.10 m. date 16.1.65.
Fragment of left radius; fragment of atlas vertebra, thoracic vertebra and body of vertebra; fragment of pubis of pelvic girdle; left scaphocuboid; fragment of the shaft of tibia; distal fragment of right humerus; fragment of occipital bone with a portion of paramastoid process. From a late level of Period II.

KLB-2, locus-XA-12, Qd-4, stratum-2, date 11.2.65.
Proximal fragment of left first rib with head and tubercle. From a late level of Period II.

KLB-2, locus-XA-15, Qd-4, depth-0.70 m., date 23.2.62.
Distal fragment of left large metatarsal. From a late level of Period II.

KLB-2, locus-E-1, stratum-18 and 19.
Right astragalus; left tibia without proximal

end; right humerus-distal fragment; second phalanx. From an early level of Period II.

KLB-2, locus-XA-6, stratum-5, depth-2.5 m. First phalanx-3; fragment of left calcaneum; distal fragment of right humerus; posterior fragment of scapula with glenoid cavity; proximal and distal fragment of left femur; proximal fragment of left metatarsal; proximal fragment of left radius. From a late level of Period II.

KLB-2, locus-XA-6, stratum-6, depth-1.82 m., date 14.12.62.
First phalanx-1; second phalanx-2; left cuneiform; distal fragment of left scapula, horn-2 fragments. From a late level of Period II.

KLB-2, locus-XA-8, S.E. sector, stratum-21, date 15.12.62.
Horn-core-2 fragments. From an early level of Period II.

KLB-2, locus-XA-8, Qdt-1, stratum-6, depth-1.20 m.
Left trapezoid and magnum; fragment of left pelvic girdle; right humerus-distal fragment. From a late level of Period II.

KLB-2, locus-XA-9, Qd-1, stratum-4, depth-0.50 m., date 19.12.76.
First phalanx. From a late level of Period II.

KLB-2, locus-XA-7, Qd-4, stratum-2, depth-0.63 m., date 14.2.62.
First phalanx-4, second phalanx-4; right astragalus-2; right trapezoid and magnum. From a late level of Period II.

KLB-2, locus-XB-7, XB-8, stratum-7 and 8. Fragment of cervical vertebra; distal fragment of right femur with medial and lateral condyle. From a late level of Period II.

KLB-2, locus-ZE-1, stratum-1 W, date 27.2.62
Broken right astragalus; broken caudal vertebra. From a late level of Period II.

KLB-2, locus-XA-7, Qd-1, stratum-12, depth-2.45 m.
Second phalanx; broken right scaphoid; left lunate. From a middle level of Period II.

KLB-2, locus-XA-7, Qd-4, stratum-11, depth-2.20 m., date 28.2.62.
Fragment of left calcaneum; distal fragment of metacarpal. From a middle level of Period II.

KLB-2, locus-ZE-1, stratum-5.
Broken left calcaneum; left cuneiform. From a late level of Period II.

KLB-2, locus-XB-7 and XB-8, stratum-1 to 4, depth-1.93 m., date 27.2.63.
First phalanx-2; second phalanx-1; third phalanx-1; right astragalus; left astragalus; broken two right calcaneum; left calcaneum; distal fragment of left tibia-2; (one of an young one); fragment of rib-2; right lunate; distal end of radius-4; proximal end of right radius-1; distal fragment of left radius; distal end and head fragment of left femur-2; broken left upper first and second molars; fragment of right scapula with glenoid cavity; distal end of metatarsal-3; proximal end of metatarsal-3; distal end of metacarpal-2. From a late level of Period II.

KLB-2, locus-E-2, Qd-4, Top soil, depth-E 3-3.50 m. E 2, 6.10 m. date 27.1.65.
Right lower first, second, third molars and third pre-molar. From a late level of Period II.

KLB-2, locus-XA-15, Qd-2 and 3, stratum-7, depth-1.62 m., date 27.2.63.
Left astragalus. From a late level of Period II.

KLB-2, locus-XA-7, Qd-3, stratum-1, depth-0.23 m., date 16.1.62.
Left broken scapula; left trapezoid and magnum. From a late level of Period II.

KLB-2, locus-XA-6, pit-3.
Right scaphoid. From a late level of Period II.

KLB-2, locus-XA-8, Qd-1, stratum-2, depth-0.25 m.
Broken caudal vertebra-1; thoracic broken vertebra-1; left calcaneum; second phalanx; right metacarpal-distal fragment; right radius-distal fragment. From a late level of Period II.

KLB-2, locus-XB-8, stratum-2, depth-1.20 m., date 26.12.62.
Right scaphocuboid. From a late level of Period II.

KLB-2, locus-XB-7, Qd-3, stratum-7, depth-1.55 m., date 20.1.63.
First phalanx-2; broken third phalanx-1; distal fragment of right humerus; fragment of horn-core; distal fragment of metacarpal; posterior fragment of left scapula. From a late level of Period II.

KLB-2, locus-ZE-1, stratum-4W, date 5.2.62.
Right lateral malleous; broken upper left first molar; caudal vertebra; first phalanx; right astragalus; distal fragment of left humerus; proximal fragment of left ulna with semilunar notch; distal fragment of left tibia, with lateral malleolus fused with it. From a late level of Period II.

KLB-2, locus-XA-15, Qd-3, stratum-4, date 10.2.65.
First phalanx-2; head of femur-3 fragments; fragment of axis vertebra; fragment of right calcanceum; left astragalus-3 fragments; distal end of right tibia; ulna -3 fragments; left radius-2 proximal fragments; distal end of left radius-1; fragment of distal end of right humerus; fragment of pelvic girdle (acetabulum). From a late level of Period II.

KLB-2, locus-XA-7, XA-8, stratum-1 to 8, date 4.3.63.
Broken lumbar vertebra-1; thoracic vertebra-1; atlas vertebra-1; proximal fragments of left radius-2; right calcaneum; astragalus; scahocuboid; fragment of left scapula; metacarpal-distal fragment; metatarsal without epiphysis-1. From an unstratified level.

KLB-2, locus-XA-8, S.E. sector, stratum-22, depth-3.65 to 3.88, date 14.12.62.
First phalanx-1; second phalanx-1; third phalanx-1; atlas vertebra-2; cervical vertebra-1; broken left patella; distal fragment of left radius. From an early level of Period II.

KLB-2, locus-XA-15, Qd-2 and 3, stratum-6, depth-1.40 m.
Left calcaneum; right astragalus; right lower third molar; distal fragment of metacarpal-1; distal fragment of metatarsal-1. From a late level of Period II.

KLB-2, locus-XA-9, Qd-1, stratum-12, depth-1.92 m., date 5.1.63.
First phalanx-2; second phalanx-2; third phalanx-2; caudal vertebra-2; broken cervical vertebra-2; right lunate; left astragalus; left femur. From a middle level of Period II.

KLB-2, locus-XA-6, stratum-4, depth-1.65 m.
Right humerus-2 distal fragment; metacarpal-2 distal end; radius-2 distal end; right astragalus; shaft of tibia. From a late level of Period II.

KLB-2, locus-XA-6, stratum-21, depth-6.07 m., date 29.3.62.
First phalanx-1; second phalanx-2; left astragalus; scapho-cuboid; calcaneum; tibia; distal fragment of right humerus; proximal fragment of left metatarsal. From an early level of Period II.

KLB-2, locus-XA-7, Qd-4, stratum-7.
Axis vertebra-1 fragment; cervical vertebra-1; fragment; right calcaneum; broken right patella; third phalanx-2. From a late level of Period II.

KLB-2, locus-B-7, Qd-3, stratum-10, depth-2.80 m., date 26.12.63.
Right calcaenum; first phalanx; fragment of pelvis. From a middle level of Period II.

KLB-2, locus-B-8, Qd-1, stratum-2, depth-0.45 m., date 24.1.
Cervical vertebra; third phalanx; distal fragment of left radius; pubis of left pelvis girdle. From a late level of Period II.

KLB-2, locus-XA-8, stratum-23.
Second phalanx. From an early level of Period II.

KLB-2, locus-XC-6, Qd-3, stratum-1, depth-10 m., date 24.2.62.
Right lunate. From a late level of Period II.

KLB-2, locus-XA-8, Qdt-2, stratum-10, depth-1.75 m., date
Broken left calcaneum; second phalanx; thoracic vertebra; distal fragment of metacarpal; distal fragment of metatarsal. From a middle level of Period II.

KLB-2, locus-EZ, Qd- , stratum-2, date 3.2.65.
Right astragalus; fragment of cervical vertebra; third pre-molar; first molar. From a late level of Period II.

KLB-2, locus-TXA-12, Qd-2, stratum-1, depth-20-25, date 1.1.65.
Axis vertebra-2; fragment of astragalus. From a late level of Period II.

KLB-2, locus-XB-8, Qd-2, stratum-4, depth-1.65 m.
First phalanx-2; second phalanx-1; fragment; third phalanx-1; fragment of a rig; right humerus-distal fragment; left astragalus; fragment of cervical vertebra. From a late level of Period II.

KLB-2, locus-XC-9, Qd-2, stratum-2, depth-0.68 m., date 5.2.63.
Left femur-distal fragment; right calcaneum-2; fragment of left scaphocuboid; fragment of spine of thoracic vertebra; broken left patella; broken second phalanx; distal fragment of metatarsal without epiphysis; posterior fragment of right scapula with glenoid cavity. From a late level of Period II.

KLB-2, locus-XA-15, Qd-1, stratum-5, depth-1.45 m., date 7.2.65.
First phalanx-1; second phalanx-1; third phalanx-1; fragments of a rib-2; fragment of head of humerus; fragment of distal end of shaft of femur; squamose temporal bone of the skull; third upper molar; fragment of the body of the lumbar vertebra; fragment of the proximal end tibia; fragment of proximal end of humerus with head. From a late level of Period II.

KLB-2, locus-XA-13, Qdt-1, depth-1.35 m., date 18.2.65.
Second phalanx; cervical vertebra-2; lumbar vertebra-2; lunate; patella; pelvic girdle with tuber coxae-2; fragment of right femur; fragment of right metacarpal; fragment of rib; fragment of right tibia; fragment of right scapho-cuboid. From a late level of Period II.

KLB-2, locus-XA-6, XA-7, stratum-1 to 8, date 28.2.65.
Right astragalus-2; left astragalus-1; metatarsal-4 distal fragments; patella; first phalanx; horn-core-3. From a late level of Period II.

KLB-2, locus-XA-12, Qd-4, stratum-2, depth-.35 m., date 11.2.65.
Accessory bone; right unciform; second phalanx; fragment of the body of mandible with portion of left coronoid; process of condyle. From a late level of Period II.

KLB-2, locus-E-3-, Qd-1, stratum-2, date 2.2.65.
Lower left second, third molars and third pre-molar; upper right second molar; left trapezoid and magnum. From a late level of Period II.

KLB-2, locus-XA-9, S.W. sector, stratum-4, date 5.3.62.
Broken right scaphoid; distal fragment of left tibia. From a late level of Period II.

KLB-2, locus-XA-13, Qd-1, stratum-7, depth-2 m., date 21.2.65.
Second and third phalanx; fragment of left scapula with glenoid cavity; fragment of rib-3; thoracic vertebra without spine; right calcaneum-1 fragment. From a late level of Period II.

KLB-2, locus-XA-12, Qd-4, stratum-2, depth-40 cm., date 12.2.63.
Caudal vertebra; left unciform; fragment of half of right astragalus with cut mark; second phalanx; fragment of upper molar tooth; fragment of rib, one with head and tubercle. From a late level of Period II.

KLB-2, locus-XA-12, Qd-4, stratum-3, depth-80 cm., date 14.2.65.
Fragment of left scapula with a portion of glenoid cavity; broken thoracic vertebra-3. From a late level of Period II.

KLB-2, locus-YF-12, Qd-3, stratum-2, depth-1 m., date 6.1.65.
Upper left first molar (charred) and third premolar. From a late level of Period II.

KLB-2, locus-A-6, Qd-1, stratum-4E, depth-75 cm., date 29.12.64.
Second phalanx. From a late level of Period II.

KLB-2, locus-XA-12, Qd-2, stratum-1, depth-55 cm., date 9.1.65.
Thoracic vertebra without spine. From a late level of Period II.

KLB-2, locus-XA-12, Qd-2, stratum-1, depth-55 cm., date 9.1.65.
Right patella; fragment of head of femur. From a late level of Period II.

KLB-2, locus-E-3, stratum-2, date 11.2.61.
Broken horn-core; third phalanx. From a late level of Period II.

KLB-2, locus-E-16, Qds-1 and 4, stratum-3, depth-0.80 cm., date 15.3.63.
Upper second molar; distal end portion of right tibia. From a late level of Period II.

KLB-2, locus-XA-15, Qd-2 and ~~3,~~ stratum-7, depth-1.62 m., date 27.2.65.
Broken sacrum, axis cervical and two lumbar vertebra; acetabulum of pelvic girdle; proximal portion of right metacarpal. From a late level of Period II.

KLB-2, locus-XA-15, Qd-2 and 3, stratum-9, depth-1.62 m., date 25.2.65.
Right astragalus; broken right calcaneum; proximal end of right tibia. From a late level of Period II.

KLB-2, locus-XA-15, Qd-3, stratum-2, date 9.2.65.
Proximal end of metacarpal. From a late level of Period II.

KLB-2, locus-XA-15, Qd-3, stratum-3, date 11.2.65.
Distal end right humerus with condyle-2; distal end of right femur with condyle; proximal end of shaft of metatarsal. From a late level of Period II.

KLB-2, locus-XA-15, Qd-8, stratum-5, date 12.6.63.
Right scapho-cuboid. From a late level of Period II.

KLB-2, locus-XA-17, Qd-4, stratum-2, depth-13 cm., date 2.2.63.
Distal portion of metatarsal; right trapezoid and magnum; second phalanx; proximal end of left scapula with glenoid cavity; broken mandibular portion; lower left third molar; upper right third pre-molar; proximal end of left radius. From a late level of Period II.

KLB-2, locus-E-1, Qd-1, stratum-29, depth-2.60.
Fragment of left scapula with glenoid cavity and neck; fragment of right astragalus; left humerus-2 distal fragments; fragment of horn-core; fragment of left calcaneum; dis-

tal fragment of right metacarpal; fragment of sacrum and atlas vertebra; third phalanx; upper left maxilla with first molar and third pre-molar. From an early level of Period II.

KLB-2, locus-E-1, Qd-1, stratum-15, depth-2.50 m.
Left lower third molar; caudal vertebra; first phalanx; proximal fragment of right ulna with semilunar notch. From a middle level of Period II.

KLB-2, locus-A-8, S.sector, stratum-16, date 31.3.62.
First phalanx. From a middle level of Period II.

KLB-2, locus-XA-6, stratum-3, depth-1.17, date 24.3.62.
Left lower broken second and third pre-molar; caudal vertebra-3. From a middle level of Period II.

KLB-2, locus-XA-6, stratum-3, road-1, depth-65 cm., date 13.3.62.
Broken left lower first molar. From a middle level of Period II.

KLB-2, locus-XA-6, stratum-8, N. Sector, depth-2.60 m., date
First phalanx-2; distal fragment of left femur without epiphysis. From a late level of Period II.

KLB-2, locus-XC-6, ZD-4, stratum-1, depth-20 m.
First phalanx-2; second phalanx-2; third phalanx-1; left patella; right scapho-cuboid; fragment of rib-5; proximal fragment of right tibia; distal fragment of the shaft of metatarsal. From a late level of Period II.

KLB-2, locus-XA-6, stratum-4X, depth-1.16 m., date 23.12.62.
Proximal end of right tibia. From a late level of Period II.

KLB-2, locus-XA-6, stratum pit sealed by (8), depth 3.10 m.
Right astraglus; second phalanx-2. From a late level of Period II.

KLB-2, locus-XA-6, road-3, stratum-4, depth-63-76 m.
Distal end of metatarsal; right lower third molar. From a late level of Period II.

KLB-2, locus-XA-7, Qd-1, stratum-2, depth-0.40 cm., date 13.3.62.
Broken caudal vertebra. From a late level of Period II.

KLB-2, locus-XA-7, Qd-4, stratum-2, depth-1.70 cm., date 17.2.62.
Third phalanx. From a late level of Period II.

KLB-2, locus-XA-7, Qd-4, S.W. sector, stratum-17.
Second phalanx. From an early level of Period II.

KLB-2, locus-XA-7, Qd-4, stratum-12, depth-2.40 cm., date 4.3.63.
First phalanx-1; second phalanx-1; left trapezoid and magnum. From a middle level of Period II.

KLB-2, locus-XA-7, Qd-4, stratum-11, date 21.3.62.
Broken right lower third molar. From a middle level of Period II.

KLB-2, locus-XA-7, Qd-4, stratum-7.
Left combined trapeizoid and magnum. From a late level of Period II.

KLB-2, locus-A-8, stratum-11, depth-1.35 m.
Second phalanx; proximal extremity or right tibia; distal fragment of right humerus; distal fragment of left tibia. From a middle level of Period II.

KLB-2, locus-XB-8, stratum-3, depth-1.30 m., date 26.12.62.
First phalanx-2; second phalanx;-4; third phalanx-1; right astragalus-2; broken tho-

racic vertebra; caudal vertebra; left scaphoid; right calcaneum; proximal fragment of right femur. From a late level of Period II.

KLB-2, locus-XA-9, S.W. sector, stratum-11, date 28.3.63.
Fragment right pre-maxilla. From a middle level of Period II.

KLB-2, locus-XA-9, stratum-15.
Second phalanx-1; third phalanx-1; left calcaneum; vertical ramus of left mandible with condyle and coracoid process; pelvis with a portion of acetabulum and pubis; proximal fragment of left metacarpal; distal fragment of right femur with lateral and medical condyles; second left lower pre-molar. From a middle level of Period II.

KLB-2, locus-XA-8, stratum-10, date 6.3.62.
First phalanx-3; third phalanx-1; left astragalus; scaphoid; head fragment of left femur-2; fragment of right calcaneum; proximal fragments of right tibia-2; distal fragment of right metatarsal; proximal fragment of left ulna with semilunar notch; fragment of right scapular with glenoid cavity; distal fragment of left humerus; fragment of right pelvis with a portion of pubis and acetabula; fragment of vertical ramus of left mandible with condyle. From a middle level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-2, depth-85 cm., date 31.1.63.
Right lunate; left trapezoid and magnum; upper left two second, three third molars. From a late level of Period II.

KLB-2, locus-XA-12, Qd-3, stratum-3, depth-80 cm., date 21.1.63.
Fragment of rib-5; upper right second molar; fragment of pelvic girdle; caudal vertebra; distal end of left condyles. From a late level of Period II.

KLB-2, locus-XA-12, Qd-4, stratum-5, depth-1.43 m., date 21.2.65.
Lumbar vertebra. From a late level of Period II.

KLB-2, locus-E-2, Qd-4, stratum-2, depth-2.70 m., date 14.2.65.
Broken distal end of metacarpal. From a late level of Period II.

KLB-2, locus-E-1, stratum-18 and 19, date 23.3.63.
Second phalanx. From an early level of Period II.

KLB-2, locus-D-1, Qd-2, stratum-4, depth-1.45 m., date 1.4.62.
First phalanx; fragment of a rib. From a late level of Period II.

KLB-2, locus-B-6, Qd-4, stratum-2, date 1.1.65.
Upper right first molar. From a late level of Period II.

KLB-2, locus-XB-7, Qd-4, stratum-2N, depth- 0.75 m., date 1.2.63.
First phalanx-1; second phalanx-2; right scaphoid. From a late level of Period II.

KLB-2, locus-XB-7, Qd-4, stratum-3N, depth- 0.30 m., date 17.2.63.
First phalanx-1; broken second phalanx-2; broken right astragalus; broken right patella; distal fragment of metacarpal. From a late level of Period II.

KLB-2, locus-XB-7, Qd-1, pit-1, stratum-5A, date 10.2.63.
Right calcaneum. From a late level of Period II.

KLB-2, locus-E-3, Qd-3, stratum-2, depth-9.60 - .60 m., date 14.2.63.
Third phalanx; proximal end of left ulna; right lunate; ilium with acetabulum. From a late level of Period II.

KLB-2, locus-XA-9, Qd-3, stratum-16.
First phalanx-1; second phalanx-2; third phalanx-1; fragment of a rib; left patella; atlas vertebra; left pelvis with pubis. From a

middle level of Period II.

KLB-2, locus-XA-9, Qd-3, stratum-11.
Fragment of left astragalus; second phalanx. From a middle level of Period II.

KLB-2, locus-B-8, Qdt-4, stratum-5, depth-1.65 m., date 27.1.63.
Caudal vertebra-2; distal fragment of metacarpal. From a late level of Period II.

KLB-2, locus-XA-12, Qd-4, stratum-5, depth-1.43 m., date 21.2.65.
Fragment of rib, broken right calcaneum. From a late level of Period II.

KLB-2, locus-XA-6, depth- 2.15 m., date 3.2.65.
Broken caudal vertebra; second phalanx; distal fragment of metatarsal. From a late level of Period II.

KLB-2, locus-XA-7, stratum-4X, depth- 0.75-0.90 cm., date 14.12.62.
Fragment of horn-core; left astragalus; second phalanx-2; right scaphoid; posterior fragment of right femur. From a late level of Period II.

KLB-2, locus-F-16, Qd-2, stratum-3, depth-60 B.S., date 25.2.
Proximal end of right metacarpal; distal condyles of right humerus; distal condyles of right femur; left lunate; left scaphoid. From a late level of Period II.

KLB-8, locus-XA-8, S.E. sector, stratum-2A, depth- 4.25 to 4.40, date 2.1.63.
Third phalanx. From a late level of Period II.

KLB-8, locus-XA-8, S.E. sector, stratum-22, depth- 3.70 m., date 16.12.62.
Second phalanx; broken right scaphocuboid; right astragalus; cervical vertebra; left scaphoid; right large cuneiform; fragment of left pelvis with acetabulum; left calcaneum; broken right metacarpal; fragment of left lower pre-molar. From an early level of Period II.

KLB-2, locus-XA-8, S.E. sector, stratum-23, date 15.10.62.
Broken right calcaneum; first phalanx-1; third phalanx-2; right lunate and scaphoid; distal fragment of metatarsal and metacarpal. From an early level of Period II.

KLB-2, locus-XA-8, Qd-1, stratum-5.
Body of mandible; broken right astragalus. From a late level of Period II.

KLB-2, locus-XA-17, Qd-4, stratum-4.
Proximal fragment of femur with head and trocharler. From a late level of Period II.

KLB-2, locus-B-7, Qd-4, stratum-2.
Left astragalus; fragment of a rib. From a late level of Period II.

KLB-2, locus-B-7, Qd-3, stratum-10, depth-.75 m., date 25.12.62.
Left scapho-cuboid; right cuneiform; distal fragment of metatarsal; first phalanx-3; second phalanx-2. From a middle level of Period II.

KLB-2, locus-XA-6, stratum-60.
First phalanx. From a late level of Period II.

KLB-2, locus-XA-5, Qd-1, stratum-2.
Broken right femur with lateral condyle; right astragalus; proximal fragment of left metacarpal. From a late level of Period II.

KLB-2, locus-XA-7, Qd-3, stratum-4, depth-0.80 m.
Left lunate; scaphoid; cuneiform; trapezoid and magnum; proximal fragment of metacarpal. From a late level of Period II.

KLB-2, locus-E-2, Qd-4, stratum-3, depth-0.80, date 26.2.64.
Fragment of right horizontal ramus of mandible-2. From a late level of Period II.

KLB-2, locus-C-7, Qd-2, stratum-4, depth-

.80 cm., date 18.1.64.
Right astragalus. From a late level of Period II.

KLB-2, locus-D-8, Qd-3, stratum-2, depth-0.30.
First phalanx. From a late level of Period II.

KLB-2, locus-D-7, Qd-1, stratum-6, depth-1.70 m., date 23.1.64.
First phalanx-2. From a late level of Period II.

KLB-2, locus-D-9, Qd-4, stratum-4, depth-.75 cm., date 6.2.64.
Anterior fragment of left horizontal ramus of mandible. From a late level of Period II.

KLB-2, locus-D-5, Qd-2, stratum-3X, date 15.2.64.
Upper left and right first molar; first phalanx. From a late level of Period II.

KLB-2, locus-XA-7, Qd-3, stratum-20, depth-5.60 m., date 17.3.62.
Broken right calcaneum. From an early level of Period II.

KLB-2, locus-D-7, Qd-1.
Head fragment of femur; right astragalus; second phalanx-2. From an unstratified level.

KLB-2, locus-D-9, Qd-3, stratum-2, depth-56 cm., date 18.1.64.
Fragment of pelvic girdle; second phalanx; fragment of axis vertebra; distal fragment of left radius; broken left upper second molar; right upper first molar. From a late level of Period II.

KLB-2, locus-XA-6, stratum-4X, depth- 1.65 m., date 13.12.62.
First phalanx-5; left calcaneum; fragment of atlas vertebra; distal fragment of right metatarsal; distal fragment of right tibia. From a late level of Period II.

KLB-2, locus-XA-6, pit sealed by stratum-8, depth-3.10 m., date 15.3.62.
Broken thoracic vertebra; right combined trapezoid and magnum; right astragalus; first phalanx-1; second phalanx-2. From a late level of Period II.

KLB-2, locus-XA-6, Qd-3, stratum-3, depth-1.00 m., date 22.1.63.
Distal fragments of right femur with out epiphysis; broken second phalanx; broken right astragalus; distal fragment of metacarpal. From a late level of Period II.

KLB-2, locus-XA-6, stratum-8, depth- 2.15 m., date 1.1.63.
Second phalanx; broken left scapho-cuboid; proximal fragment of right metacarpal. From a late level of Period II.

KLB-2, locus-XA-6, stratum-3, depth- 80 cm., date 27.12.62.
Distal fragment of metatarsal. From a late level of Period II.

KLB-2, locus-XA-6, road-2, depth-70 cm., date 27.2.62.
Fragment of right pelvis. From a late level of Period II.

KLB-2, locus-XA-6, stratum-11, depth-3.50 m.
First phalanx-1; second phalanx-1; right scapho-cuboid; left metatarsal left ulna with olecranon process; right pelvis with pubis. From a middle level of Period II.

KLB-2, locus-XA-8, Qdt-3, stratum-3, depth-0.75 m., date 14.2.62.
Second phalanx; proximal fragment of left metacarpal. From a late level of Period II.

KLB-2, locus-XA-8, Qdt-1, depth- 0.45 m.
Left patella; distal fragment of right humerus; distal fragment of metatarsal. From a late level of Period II.

KLB-2, locus-XB-7, Qdt-1, stratum-4, depth-0.90 m.

First phalanx;-third phalanx; right patella. From a late level of Period II.

KLB-2, locus-XA-1Y, stratum-14.
First phalanx; right astragalus; left calcaneum; distal fragments of left metatarsal-2. From a middle level of Period II.

KLB-2, locus-E-1, Qd-1, stratum-3, depth-8.30 m.
Fragment of rib-2; third phalanx; left upper second molar. From a late level of Period II.

KLB-2, locus-XA-7, stratum-8, depth-2.20 m., date 20.12.62.
Left and right astragalus; first phalanx-1; third phalanx-1; cervical vertebra; right lower first molar; first phalanx-2; second phalanx-3; distal fragment of metacarpal; right calcaneum; right humerus; fragment of right scapula with glenoid cavity and neck, distal fragment and a head of left femur. From a late level of Period II.

KLB-2, locus-XA-7, stratum-1 to 4, depth-1.93 m., date 27.2.63.
Distal fragment of left, metatarsal-3; right metatarsa-1; distal fragment of right humerus-3; first phalanx; proximal and distal fragment of left femur; fragment of left scapula; distal fragment of metacarpal. From a late level of Period II.

KLB-2, locus-D-9, Qd-3, stratum-5, depth-.95 cm., date 17.1.64.
Second phalanx. From a late level of Period II.

KLB-2, locus-XA-6, road-4, depth-96 cm., date 21.12.62.
Broken first phalanx-2; second phalanx-2; broken caudal vertebra-1; cervical vertebra-1; right upper second molar; fragment of a rib with head and tubercle; left astragalus; left scapula with glenoid cavity; right tibia; distal fragment of left metacarpal-2; distal fragment of left metatarsal-2. From a late level of Period II.

KLB-2, locus-XA-6, stratum-25, depth-7.00 m., date 21.3.62.
Broken second phalanx; fragment of a rib; with head and tubercle; proximal fragment of right ulna with semilunar notch. From an early level of Period II.

KLB-2, locus-XA-3, Qd-3, stratum-18 S.E. depth-3.45, date 29.3.62.
First phalanx; right calcaneum; two fragments of rib with head and Tubercle. From an early level of Period II.

KLB-2, locus-E-1, stratum-22, depth-4.55 m.
Fragment of rib; right lunate, scaphoid; unciform; combined trapezoid and magnum; broken thoracic vertebra; axis vertebra. From an early level of Period II.

KLB-2, locus-E-1, stratum-10, date 22.3.
Left cuneiform; lunate; second phalanx; fragment of rib with head and tubercle. From a late level of Period II.

KLB-2, locus-XA-17, stratum-10.
Broken second phalanx; right scapho-cuboid. From a late level of Period II.

KLB-2, locus-XA-9, Qd-3 and 4, stratum-20, depth-3.70 to 3.87, date 18.1.63.
Two first, four second and four third phalanx; right astragalus; left scaphoid; broken caudal vertebra; broken right lower second molar and third pre-molar; broken rib; two posterior fragment of left scapula with glenoid cavity; broken left calcaneum; vertical ramus of left mandible with coronoid process and condyle; distal fragment of right tibia; proximal fragment of left ulna with olecranon process. From an early level of Period II.

KLB-2, locus-XA-9, Qd-3 and 4, stratum-15, depth-2.85 m , date 8.1.63.
Third phalanx; two caudal vertebra; right cuneiform; right upper second and third pre-molar; fragments of right lower pre-molar; fragment of horizontal ramus of left mandible.

From a middle level of Period II.

KLB-2, locus-XA-6, stratum-6, depth-1.85.
Distal fragments of left humerus; second phalanx-2; third phalanx-1; broken left scapho-cuboid; distal fragment of left metatarsal; fragment of atlas vertebra. From a late level of Period II.

KLB-2, locus-XA-6, pit-3, stratum-5 by (1).
Right calcaneum; first right upper pre-molar; fragment of third phalanx; shaft of ilium with a portion of acetabulum. From a late level of Period II.

KLB-2, locus-XA-6, stratum-5, road-4, depth-.76 cm , date 21.12.70.
First phalanx-2; second phalanx-2; fragment of right femur without distal epiphysis; atlas vertebra-2 fragment; fragment or a rib with head, neck and tubercle; right calcaneum; left scapula with glenoid cavity-2. From a late level of Period II.

KLB-2, locus-XC-9, Qd-2, stratum-3, depth-1.00 m , date 6.2.63.
First phalanx-4; left calcaneum-2; fragment of a rib; fragment of left pelvis; thoracic vertebra; cervical vertebra; left metacarpal-2. From a late level of Period II.

KLB-2, locus-E-1, Qd-1, stratum-19.
Left and right scapho-cuboid; caudal vertebra; right astragalus; left calcaneum; first upper left molar; second phalanx-3; distal fragment of left humerus. From an early level of Period II.

KLB-2, locus-XA-1, stratum-5, depth-2.94.
Right calcaneum; left calcaneum; first phalanx-3; second phalanx-3; right astragalus-2; ;left lunate; fragment of horn-core; fragment of horizontal ramus of left mandible with second molar. From a late level of Period II.

KLB-2, locus-XA-17, stratum-15.
Two broken right patella; first phalanx-1; second phalanx-1; third phalanx-1; proximal and distal fragment of right tibia; distal fragment of right femur; left cuneiform; broken right scaphocuboid; body of mandible; left lateral malleolus. From a middle level of Period II.

KLB-2, locus-XA-9, Qd-1 and 2, stratum-20, depth-4.00 m.
Left lunate; broken left calcaneum-2; second phalanx-2; first phalanx-2; axis vertebra-1; thoracid vertebra-5; lumbar vertebra-2; cervical vertebra-3; proximal fragment of right metatarsal; distal fragment of right metatarsal; proximal fragment of right metacarpal; distal fragment of metacarpal; fragmnet of pelvic girdle; distal frament of left metatarsal; distal fragment of right femur; proximal fragments of right radius. From an early level of Period II.

KLB-2, locus-XA-9, Qd-1 and 2, stratum-12.
Left astragalus; second phalanx-2; third phalanx-2. From a middle level of Period II.

KLB-2, locus-XA-6, raod-3, depth-63-76 cm., date 20.12.62.
First phalanx-3; second phalanx-3; third phalanx-1; combined right trapezoid and magnum; right calcaneum; left astragalus; caudal vertebra-1; atlas vertebra-1; cervical vertebra-1; fragment of horn-core; fragment of a rib with head and tubercle. From a late level of Period II.

KLB-2, locus-D-9, Qd-2, stratum-9, depth-1.03 m.
First phalanx-2; second phalanx-2; third phalanx-2; right trapezoid and magnum; left calcaneum; lunate; scapho-cuboid. From a late level of Period II.

KLB-2, locus-XA-8, Qd-1, stratum-2, depth-0.15, date 15.12.72.
Proximal fragment of right femur; distal fragment of left radius; fragment of left scapula with head, neck and glenoid cavity. From a late level of Period II.

KLB-2, locus-XA-1, Qd-1, stratum-25, date 3.4.62.
Thoracic vertebra without spine-2; second phalanx-2. From an early level of Period II.

KLB-2, locus-XA-9, stratum-12.
Proximal fragment of left metatarsal; fragment of a rib; right.astragalus sescond phalanx; fragment of verticalramus of right mandible. From a middle level of Period II.

KLB-2, locus-XA-7, Qd-1, stratum-7, date 4.4.62.
Second phalnax. From a late level of Period II.

KLB-2, locus-XA-7, Qd-1, stratum-2, depth-1 m., date 20.2.62.
Axis vertebra-2; caudal vertebra-1; first phalanx-1; third phalanx-2; fragment of a horn-core; left lunate; cuneiform; left upper first molar; distal fragment of left humerus; distal fragment of right metatarsal; right scapula with glenoid cavity; proximal fragment of right radius. From a late level of Period II.

KLB-2, locus-XA-7, Qd-4, stratum-9, depth-2.50 m.
First phalanx-2; third phalanx-1; right patella; distal fragment of metacarpal. From a late level of Period II.

KLB-2, locus-XA-7, Qd-4, stratum-13, depth-2.9 m.
Distal fragment of right tibia; right scapula with glenoid cavity; first phalnax-2; second phalanx-2; third phalanx-3. From a middle level of Period II.

KLB-2, locus-XA-7, Qd-4, stratum-10.
First phalanx; right ulna with semilunar notch. From a middle level of Period II.

KLB-2, locus-XA-7, Qd-4, stratum-15, depth-4.20 m., date 8.3.62.
First phalanx; distal fragment of metacarpal. From a middle level of Period II.

KLB-2, locus-XA-6, stratum-6, depth-2.31 m.
Fragment of the body of mandible; distal fragment of right humerus; right ulna with semilunar notch; fragment of right scapula with glenoid cavity; first phalanx-1; second phalanx-2. From a late level of Period II.

KLB-2, locus-XA-17, stratum-11, date 5.2.62.
Fragment of mandible with left foramen; left lunate; second phalanx. From a middle level of Period II.

KLB-2, locus-XA-17, stratum-5.
Fragment of left scapula with glenoid cavity. From a late level of Period II.

KLB-2, locus-E-1, E-2, stratum-1, date 20.3.62.
Second phalanx. From a late level of Period II.

KLB-2, locus-XA-9, S.E. sector, stratum-3, date 5.2.63.
Distal fragment of right humerus. From a late level of Period II.

KLB-2, locus-XB-7, Qd-1, stratum-5A, depth-0.65, date 30.6.63.
Proximal fragment of right ulna with olecranon process. From a late level of Period II.

KLB-2, locus-XB-7, Qd-3, stratum-3, depth-0.95, date 20.12.62.
Broken right astragalus; first phalanx-1; third phalanx-1; left lunate and patella. From a late level of Period II.

KLB-2, locus-XB-7, Qd-2, stratum-2, date 23.1.63.
First phalanx-1; second phalanx-1; right cuboid; fragment of rib with broken tubercle. From a late level of Period II.

KLB-2, locus-XA-8, S.W. Sector, stratum-12, date 13.2.62.
Fragment of left scapula with glenoid cavity. From a middle level of Period II.

KLB-2, locus-XA-8, stratum-8.
Second phalanx. From a late level of Period II.

KLB-2, locus-XA-16, stratum-2, depth-1.00 m.
Second phalanx-1; third phalanx-1. From a late level of Period II.

KLB-2, locus-XA-10, Qd-1, stratum-5, depth-10 cm.
Incisor teeth-3. From a late level of Period II.

KLB-2, locus-YA-12, Qd-1, stratum-4, depth-1.20 m., date 3.3.65.
Body fragment of thoracic vertebra. From a late level of Period II.

KLB-2, locus-C-6, Qd-2, stratum-5, date 6.1.65.
Caudal vertebra. From a late level of Period II.

KLB-2, locus-C-6, Qd-2, stratum-3X, date 7.1.65.
First phalanx. From a late level of Period II.

KLB-2, locus-XA-6, Qd-2, stratum-3, date 30.12.64.
Lumber vertebra with choping mark; right ramus of mandible. From a late level of Period II.

KLB-2, locus-H6, Qd-2, stratum-3E, date 30.12.64.
Caudal vertebra; second phalanx. From a late level of Period II.

KLB-2, locus-XA-15, Qd-3, stratum-4, date 10.2.65.
Fragment of the condyle of femur; condyles of metatarsal; distal fragment of right humerus with medial and lateral condyles; metacarpal-2 distal fragment; fragment of right calcaneum; fragment of rib-2; right upper first pre-molar; left and right pubis of pelvic bone with a portion of acetabulum. From a late level of Period II.

KLB-2, locus-XA-6, stratum-23, depth-4.15 m.
Broken lumbar vertebra; vertical ramus of left mandible with condyle and broken coronoid process; caudal vertebra; second phalanx; distal fragment of left femur with epiphysis; distal fragment of left tibia. From an early level of Period II.

KLB-2, locus-XA-6,stratum-25.
First phalanx-1; second phalanx-2; right cuneiform; broken left upper first molar. From a late level of Period II.

KLB-2, locus-XA-6, stratum-1, depth-.65 m, date 18.3.62.
Fragment of a rib with head and tubercle; trapezoid and magnum. From a late level of Period II.

KLB-2, locus-XA-9, stratum-5.
Left patella; left scapho-cuboid. From a late level of Period II.

KLB-2, locus-XA-9, Qd-1 and 2, stratum-19, depth-3.85 m., date 13.1.63.
Left and right calcaneum; right astragalus-2; fragment of a rib; first phalanx-1; second phalanx-1; third phalanx-1; caudal vertebra; left scapho-cuboid; fragment of second lower molar. From an early level of Period II.

KLB-2, locus-XA-9, Qd-3, stratum-16, S.E. date 23.3.62.
Left squamus temporal bone of the skull; fragment of pubis with acetabulum. From a middle level of Period II.

KLB-2, locus-XA-9, Qd-4, stratum-22, depth-4.00 m., date 19.1.62.
First phalanx-1; second phalanx-1; third phalanx-1; right patella-3 fragment; fragment of left calcaneum; broken left large cuneiform; fragment of right astragalus (charred); distal fragment of metatarsal. From an early level of Period II.

KLB-2, locus-XA-12, Qd-2, stratum-4, depth-90 cm., date 14.1.65.

First phalanx-2; left astragalus; proximal end of left scapula; upper right first, second, third molars. From a late level of Period II.

KLB-2, locus-XA-15, trench 2 and 3, stratum-7, depth-1.62 m., date 25.2.65.
Broken spine of vertebra; fragments of pelvic girdle; left astragalus; left scapho-cuboid; left calcaneum; left metatarsal-2 distal end; two proximal 7 one distal end of left tibia with medial and lateral condyles, malleolus; broken thoracic vertebra-3; lumbar vertebra-3; broken proximal end of left metacarpal; fragment of left mandible with condylar portion; broken mandibular pieces; fragment of right mandible; broken left mandible with first molar and first, second and third pre-molars. From a late level of Period II.

KLB-2, locus-YF-2, stratum-4, depth-1.65 m., date 4.1.62.
First phalanx-2; broken first phalanx-1; right scaphoid. From a late level of Period II.

KLB-2, locus-XA-6, stratum-6b, depth-1.92 m.
Distal end of metatarsal. From a late level of Period II.

KLB-2, locus-XA-15, Qd-3, stratum-3, date 11.2.65.
Proximal portion of left scapula with glenoid cavity; first phalanx-3; left astragalus; fragment of the distal end of right tibia; proximal end of right tibia; proximal portion of right radius-2; shaft of metacarpal; proximal portion of right metacarpal. From a late level of Period II.

KLB-2, locus-YF-10, Qd-2, St. DVM-pit-1, date 10.1.65.
One complete skull. From a late level of Period II.

KLB-2, locus-XA-6, stratum-3, depth-1.40 m., date 28.2.62.
First phalanx. From a late level of Period II.

KLB-2, locus-XA-8, Qd-1, stratum-24, depth-Right calcaneum; second phalanx-1; third phalanx-1; thoracic vertebra; cervical vertebra; caudal vertebra-2; distal fragment of right tibia. From an early level of Period II.

KLB-2, locus-XA-9, Qd-3 and 4, stratum-14.
Right lower first and second pre molar. From a middle level of Period II.
Bos qourus H. Smith

KLB-1, locus-F-8, Q-4.
Broken rib; broken thoracic vertebra-4; broken vertebral spine; proximal portion with head of left humerus; broken axis vertebra; proximal portion of metatarsal; distal condylar portion of right humerus. From an unstratified level.

KLB-1, locus-ZB-8, Qd-2, stratum-14, depth-3.75.
Distal end condyles of right humerus. From a middle level of Period II.

KLB-1, locus-ZB-8, Qd-2, stratum-10, date 4.2.66.
Fragment of proximal end with head of left humerus; lower third molar; distal end of left humerus. From a middle level of Period II.

KLB-2, locus-XA-15, stratum-2 and 3, depth-1.62 m., date 25.2.65.
Proximal fragment of right humerus; distal end and shaft of left femur; broken left femur (without proximal end and distal condyles); distal portion of left humerus. From a late level of Period II.

KLB-2, locus-XA-15, 2 and 3, stratum-7, depth-1.62, date 26.2.65.
Sacrum vertebra; fragment of pelvic girdle-2; thoracic vertebra; fragment of illium of left pelvic girdle; fragment of blade of right scapula. From a late level of Period II.

KLB-2, locus-XA-10, Qd-2, stratum-3, depth-0.75 m., date 26.12.65.
First phalanx; third phalanx. From a late level

of Period II.

KLB-2, locus-XB-16, Qd-2, stratum-3, date 29.12.65.
Distal end of right humerus with condyles. From a late level of Period II.

KLB-2, locus-XA-15, trench 2 and 3, stratum-7, depth-1.62 m., date 27.2.62.
Broken right scapula. From a late level of Period II.

KLB-2, locus-XA-17, Qd-4, layer-2, stratum-7, depth-13 cm.
Fragment of scapula with glenoid cavity. From a late level of Period II.

KLB-2, locus-XA-15, trench 2 and 3, stratum-9, depth-1.62 m., date 25.2.65.
First phalanx-2, (one broken); proximal end of the right ulna with olecranon process; proximal end of the left humerus; right metatarsal; broken metatarsal; distal end portion of left humerus. From a late level of Period II.

Bubalis bubalis Linneaus
KLB-1, locus-D-1, Qd-1 and 2, stratum-12, depth-2.30, date 3.3.63.
First phalanx. From a middle level of Period II.

KLB-1, locus-ZA-1, Qd-4, foundation bence of well.
Fragment of head of right humerus; fragment of distal end of left radius. From an early level of Period II.

KLB-1, locus-XD-1, Qd-1, pit 1 sealed by S.R. Date 13.2.63.
Right scaphoid; fragment of distal end of right scapula with glenoid cavity. From a late level of Period II.

KLB-1, locus-YC-2, Qd-3, Dump layer, stratum-2, depth-90, date 3.1.63.
Broken left astragalus-2; fragments of left calcaneum distal end of radius; distal end of metacarpal; scapula with a portion of glenoid cavity and neck. From a late level of Period II.

KLB-1, locus-B-5, Qd-1, stratum-3, depth-0.70 m., date 5.12.63.
Fragment of left lower third molar. From a late level of Period II.

KLB-1, locus-XB, Qd-2, stratum-9, depth-1.90 m., date 5.2.63.
Fragments of proximal end of right femur; distal end of left femur. From a late level of Period II.

KLB-1, locus-XF-2, Qd-2, stratum-4, depth-65 m., date 12.12.63.
Fragments of upper second and third premolars. From a late level of Period II.

KLB-1, locus-XD-1, Qd-1, stratum-6 A.R.
Fragment of distal end of right radius. From a late level of Period II.

KLB-1, locus-YC-2, Qd-4, stratum-1A, depth-1.05 m., date 16.2.62.
Fragments of proximal end of left radius; left astragalus; fragment of proximal end of right femur; fragment of distal end of left tibia; left humerus with media; and lateral condyle. From a late level of Period II.

KLB-1, locus-YD-2, Qd-3, stratum-1A, ye-1, west 1.40 x 0.70, depth-0.53 m., date 15.12.62.
Fragments of meatus acusticus externus (skull ear fragment); temporal bone and zygomatric process (skull); occipital condyles of nuchal crest and coronoid process (fragments of skull). From a late level of Period II.

KLB-1, locus-XC-1, Qd-2, stratum-2B, depth-.85, date 31.1.63.
Distal end of right tibia. From a late level of Period II.

KLB-1, locus-YA-1, Qd-4, dump-1, date 12.1.63.

Proximal end of right radius; distal end of left radius; first phalanx; fragment of a rib; fragments of left and right femur with medial condyle. From a late level of Period II.

KLB-1, locus-XC-1, Qd-2, stratum-2A, depth-.90 m, date 2.1.63.
Proximal end of right tibia. From a late level of Period II.

KLB-1, locus-XB-1, Qd-3, stratum-2, depth-.50 m, date 10.2.63.
Third phalanx. From a late level of Period II.

KLB-1, locus-YF-2, Qd-2, stratum-22, date 10.2.63.
Right cuneiform; right scaphoid; right lunate. From an early level of Period II.

KLB-1, locus-XD-1, Qd-1, pit-1, stratum-5R, date 12.2.63.
Fragment of right pelvis with a portion of acetabulum. From a late level of Period II.

KLB-1, locus-XA-1, Qd-1, depth-.35 cm., date 16.1.63.
Fragment of rib with head neck and tubercle; distal part of left tibia. From a late level of Period II.

KLB-1, locus-YF-12, Qd-3, stratum-2, depth-.95 m., date 4.2.65.
Fragment of shaft of femur; proximal end of metacarpal; proximal end of metatarsal. From a late level of Period II.

KLB-1, locus-ZD-8, Qdt-4, stratum-2, depth-.40 cm., date 4.2.65.
Fragment of pelvic girdle-3; distal end of radius; fragment of portion of ilium of pelvic girdle-2; fragment of gluteus surface of ilium with a portion of pit for lateral head of ractus femurs. From a late level of Period II.

KLB-1, locus-D-3, Qd-1, stratum-7, S.W., depth-1.35 to 1.50 m., date 3.3.63.
Proximal fragment of right femur with head; proximal fragment of left humerus. From a late level of Period II.

KLB-1, locus-YF-12, Qd-1, dump-1, date 14.1.65.
Fragment of shaft of right tibia; distal end of metatarsal of young one with condyle. From a late level of Period II.

KLB-1, locus-ZD-6, Qd-2, stratum-1.
Right calcaneum; first phalanx; second phalanx; left astragalus; distal end of tibia; proximal end of metatarsal. From a late level of Period II.

KLB-1, locus-ZB-19, Qd-2, stratum-8, depth-1.50 to 1.80 m, date 17.2.66.
First phalanx-2; second phalanx-2; right astragalus; head portion of right astragalus; proximal end of left scapula with glenoid cavity. From a late level of Period II.

KLB-1, locus-ZB-19, Qd-2, stratum-7, depth-1.20-1.15 m., date 16.2.62.
Distal fragment of metacarpal. From a late level of Period II.

KLB-1, locus-XA-12, Qd-1, stratum-2.
Second phalanx. From a late level of Period II.

KLB-1, locus-YC-2, Qd-3, stratum-5, depth-2.05 m, date 10.1.63.
Fragment of lower right third pre-molar. From a late level of Period II.

KLB-1, locus-C-8, Qd-4, stratum-3, depth-50 cm.
Broken right patella. From a late level of Period II.

KLB-1, locus-YC-2, Qd-2, stratum-6, depth-1.73 m.
Distal fragment of left femur. From a late level of Period II.

KLB-1, locus-ZD-8, Qd-2, pit-1, stratum-8, depth-2.10 m., date 3.2.66.
Fragment of left pelvis with acetabulum and

portion of ischemu; lumbar vertebra; second phalanx; left lunate; proximal fragment of tibia with epiphysis. From a late level of Period II.

KLB-1, locus-YC-2, Qd-4, stratum-12, depth-1.35 m., date 18.12.62.
Distal fragment of left femur with lateral and medial condyles; fragment of horizontal ramus of right mandible with broken second and third molars. From a middle level of Period II.

KLB-1, locus-XE-2, Qd-2, stratum-3, date 6.2.64.
Fragment of right horizontal ramus of mandible with second premolar; ramus of right mandible with third molar. From a late level of Period II.

KLB-1, locus-YC-2, Qd-3-4, stratum-1, dump., date 2.8.66.
Fragment of left pelvic bone-2; right pelvic girdle with a portion of acetabulum along a portion of shaft of ilium; left cuneiform; broken second phalanx; fragment of right scapula with glenoid cavity. From a late level of Period II.

KLB-1, locus-XC-1, Qd-2, stratum.
Fragment of atlas vertebra; first phalanx; right lunate; fragment of left calcaneum. From an unstratified level.

KLB-1, locus-YA-1, Qd-4, stratum-1, depth-.54 cm.
Left calcaneum-1; right calcaneum-1. From a late level of Period II.

KLB-1, locus-ZC-2, stratum-9, date 20.2.65.
Distal fragment of right humerus. From a late level of Period II.

KLB-1, locus-XB-1, Qd-3, stratum-3.
First phalanx-3; left scaphoid; right scaphoid; left lunate; left trapezoid and magnum. From a late level of Period II.

KLB-1, locus-ZB-8, Qd-2, stratum-14, depth-3.75 m., date 10.2.62.
Thoracic vertebra-2; (one broken). From a middle level of Period II.

KLB-1, locus-YF-13, Qd-3, date 8.1.65.
Second phalanx. From an unstratified level.

KLB-1, locus-ZC-8, Qd-2, stratum-12, depth-4.85 cm., date 23.2.66.
Proximal end of left humerus; distal end of left humerus. From a middle level of Period II.

KLB-1, locus-YA-8, Qd-2, stratum-4, No. 304.
First phalnax-2. From a late level of Period II.

KLB-1, locus-YA-8, Qd-2, stratum-3, date 3.3.65.
Thoracic vertebra-1. From a late level of Period II.

KLB-1, locus-ZA-8, Qd-4, stratum-7, depth-1.35.
Left scaphoid; distal end of right tibia; right astragalus. From a late level of Period II.

KLB-1, locus-XB-1, Qd-3, stratum-2, depth-1.05 m.
Left cuneiform; distal fragment of the metacarpal. From a late level of Period II.

KLB-1, locus-ZC-6, ZD-6, stratum-3, depth-9.80 m., date 20.2.63.
Left astragalus. From a late level of Period II.

KLB-1, locus-YF-9, Qd-1, date 9.1.65.
Distal fragment of right humerus with medial and lateral condyles; first upper right pre-molar; proximal fragment of right olecranon process of ulna. From an unstratified level.

KLB-1, locus-ZB-8, Qd-3, stratum-2, depth-55 cm., date 18.2.65.

Distal fragment of right humerus with medial and lateral condyles; distal fragment of the shaft of right humerus. From a late level of Period II.

KLB-1, locus-YA-8, Qd-4, date 4.2.65.
Distal fragment of humerus; second and third upper pre-molars. From a late level of Period II.

KLB-1, locus-YF-12, Qd-3, stratum dump sealed by layer 2, date 6.1.65.
Fragment of proximal end of humerus. From a late level of Period II.

KLB-1, locus-ZB-8, Qd-3, stratum-16, depth-3.55 m., date 22.2.66.
Fragment of distal end of humerus; fragment of ulna. From a middle level of Period II.

KLB-1, locus-XC-1, Qd-2, pit-1.
Distal fragment of left femur; distal fragment of left radius; fragment of thoracic vertebra; first phalanx-1; second phalanx-1; left scaphoid; fragment of left calcaneum; broken right astragalus; proximal fragment of left metacarpal; distal fragment of right tibia; distal fragment of right humerus. From a late level of Period II.

KLB-1, locus-YF-2, Qd-2, stratum-2X.
Left scaphoid; left lunate; left astragalus; proximal fragment of left radius; right upper second pre-molar. From a late level of Period II.

KLB-1, locus-E-1, Qd-1, stratum-15, depth-2.50 m.
Fragment of thoracic vertebra; right upper first pre-molar. From a middle level of Period II.

KLB-2, locus-XA-15, trench 2 and 3, stratum-7, depth-1.62 , date 22.2.65.
Proximal fragment of right radius; distal fragment of right radius; fragment of rib; thoracic vertebra-4; with spines and one without spies; sacrum vertebra; distal portion of right ulna with olecranon process and a portion left radius with anterior and posterior portion of semilunar notch distal end of left humerus; proximal fragment of left femur with head, trochanter major and trochanteric fossa. From a late level of Period II.

KLB-2, locus-XA-12, Qd-3, stratum-9S, depth-1.45 m., date 3.2.65.
Proximal fragment of left tibia; distal fragment of left tibia. From a late level of Period II.

KLB-2, locus-XA-17, Qd-4, stratum-2, depth-12.5 m.
Broken distal end of metatarsal. From a late level of Period II.

KLB-2, locus-XA-15, Qd-4, stratum-2, date 18.2.62.
Distal fragment of left metacarpal; head of right femur. From a late level of Period II.

KLB-2, locus-XA-9, S.W. Sector, stratum-4.
Proximal fragment of right radius. From a late level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-5, depth-1.40 cm., date 6.2.65.
Second phalanx; fragment of maxilla with right second and third molar; fragment of head of humerus. From a late level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-6, depth-1.58 m., date 9.2.65.
Distal fragment of right metatarsal; distal end of right metacarpal. From a late level of Period II.

KLB-2, locus-XA-15, Qd-3, stratum-1, depth-1.50 m., date 14.2.65.
First phalanx-2; third phalanx-1. From a late level of Period II.

KLB-2, locus-XA-12, Qd-3, stratum-4, depth-.95 cm., date 22.1.65.

First phalanx; fragment of wing of atlas vertebra. From a late level of Period II.

KLB-2, locus-E-1, stratum-19 and 18.
Third phalanx; right calcaneum without epiphysis. From a middle level of Period II.

KLB-2, locus-XA-17, Qd-4, stratum-2.
First phalanx; fragment of the body of vertebra. From a late level of Period II.

KLB-2, locus-XA-15, stratum trench 2 and 3, depth-1.62 m., date 21.2.65.
Right calcaneum; left astragalus; fragment of lateral condyles of humerus. From a late level of Period II.

KLB-2, locus-ZB-16, Qd-2, stratum-2, depth-70 cm., date 5.12.65.
Distal end of left humerus; first phalanx; broken spine of thoracic vertebra; body of cervical vertebra; fragment of pelvic girdle with acetabulum. From a late level of Period II.

KLB-2, locus-XA-10, Qd-1, stratum-4, depth-0.70 m., date 2.1.65.
Upper second molar; distal fragment of right tibia; fragment of distal end of metacarpal. From a late level of Period II.

KLB-2, locus-E-1, stratum-21, date 24.3.62.
Second phalanx; fragment of a rib; fragment of left patella; right astragalus; candal vertebra; right tibia without proximal portion; right calcaneum. From an early level of Period II.

KLB-2, locus-XA-15, trench 2 and 3, depth-1.62 m., date 25.2.65.
Right radius; proximal fragment of right ulna; proximal fragment of right femur with head; cervical vertebra; fragment of skull with a portion of left horn. From a late level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-4, depth-1.12 m., date 3.2.65.
Atlas vertebra-1; axis vertebra-1; fifth broken cervical vertebra-1; cervical vertebra-2. From a late level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-2, depth-85 cm., date 31.1.65.
Left trapezoid and magnum. From a late level of Period II.

KLB-2, locus-XA-8, S.W. stratum-2.
Right lunate; first right upper broken premolar; left scaphoid. From a late level of Period II.

KLB-2, locus-XA-15, Qd-3, stratum-2, date 9.2.63.
Distal fragment of left humerus; proximal fragment of right radius; fragment of head of humerus. From a late level of Period II.

KLB-2, locus-XA-8, Qd-2, stratum-3, depth-0.30 cm., date 23.12.62.
Right metatarsal. From a late level of Period II.

KLB-2, locus-XA-15, trench 2 and 3, stratum-7, depth-1.62. m.
Left fragment of scapula-2; right fragment of scapula 1. From a late level of Period II.

KLB-2, locus-XA-12, Qd-2, stratum-4, depth-90 cm., date 14.1.76.
Second phalanx; upper left and right second pre-molar. From a late level of Period II.

KLB-2, locus-XA-15, trench 2 and 3, stratum-7, depth-1.62 m., date 25.2.65.
Fragment of pelvic girdle-5. From a late level of Period II.

KLB-2, locus-XA-, Qd-1, stratum-25.
Sesamoid bone; distal fragment of right radius. From an early level of Period II.

KLB-2, locus-XA-17, stratum-11.
Left lunate. From a middle level of Period II.

KLB-2, locus-XA-7, Qd-4, stratum-4, depth-

2.30 m.
Body fragment of atlas vertebra. From a late level of Period II.

KLB-2, locus-YF-2, Qd-2, stratum-5, date
Broken lower left first molar and second premolar. From a late level of Period II.

KLB-2, locus-DF, Qd-2, stratum-3X, date 15.2.64.
First phalanx-2; second phalanx-1; fragment of third left lower molar-2. From a late level of Period II.

KLB-2, locus-XA-7, XA-8, stratum-1 to 4, depth-1.93 m., date 27.2.63.
First phalanx-1; second phalanx-1; proximal epiphysis of right tibia of a young one; distal epiphysis of right radius of a young one; distal fragment of left humerus. From a late level of Period II.

KLB-2, locus-XA-7, stratum-7, depth-2.20 m., date 20.12.62.
Fragment of left horizontal ramus mandible with broken third and second molars; fragment of horizontal ramus of mandible; distal fragment of right femur. From a late level of Period II.

KLB-2, locus-B-7, Qd-4, stratum-3N, depth-0.30 m., date 17.2.63.
Proximal fragment of left femur. From a late level of Period II.

KLB-2, locus-XA-12, Qd-4, stratum-5, depth-1.43 m., date 21.2.65.
Body of the lumber vertebra; fragment of mandible with condyler portion; fragment of mandible with first molar and third premolar. From a late level of Period II.

KLB-2, locus-XB-7, Qd-1, stratum-5.
Broken right lunate. From a late level of Period II.

KLB-2, locus-B-7, Qd-4, stratum-2.
Left lunate. From a late level of Period II.

KLB-2, locus-XB-7, Qd-4, stratum-2N, depth-0.75 m., date 1.2.63.
Broken second phalanx. From a late level of Period II.

KLB-2, locus-XA-9, Qdt 3 and 4.
Second phalanx; proximal fragment of right radius. From an unstratified level.

KLB-2, locus-XB-6, Qd-2, stratum-6, depth-1.05 m., date 3.2.63.
Distal fragment of left tibia. From a late level of Period II.

KLB-2, locus-XB-7, Qd-4, stratum-2N, depth-0.75 m., date 1.2.63.
First right pre-molar. From a late level of Period II.

KLB-2, locus-XA-9, Qd-3, stratum-8, depth-2.15 m.
Fragment of lumber vertebra; second phalanx. From a late level of Period II.

KLB-2, locus-XA-17, Qd-3, stratum-5, depth-1.10 m., date 16.12.62.
Right astragalus; left astragalus. From a late level of Period II.

KLB-2, locus-XA-9, N.W. sector, stratum-11, date 29.12.62.
First phalanx-2; fragment of left scaphoid; distal fragment of right metacarpal. From a middle level of Period II.

KLB-2, locus-B-7, Qd-3, stratum-12.
Distal fragment of right scapula with glenoid cavity; proximal fragment of right radius; distal fragment of right humerus. From a middle level of Period II.

KLB-2, locus-XA-5, Qd-A, stratum-6, depth-1.82 m., date 10.2.63.
Proximal fragment of left tibia with medial and lateral condyles. From a late level of Period II.

KLB-2, locus-XA-10, Qd-3, stratum-4, depth-

0.75 m.
Second phalanx-2; body of the premaxilla (skull); upper right second molar teeth. From a late level of Period II.

KLB-2, locus-XA-15, Qd-3, stratum-3, depth-80 cm., date 10.2.65.
Broken left calcaneum; left astragalus; second phalanx; distal end of tibia; proximal end of metatarsal. From a late level of Period II.

KLB-2, locus-XA-17, Qd-4, stratum-2, depth-13 cm.
Broken Metatarsal -2; second phalanx -6; first phalanx-2; proximal end of metatarsal-2; right trapezoid magnum-2; broken left femur; broken right calcaneum-2; upper left second premolar; distal portion of right tibia; distal portions of left and right humerus; unciform; asscesory carpal bone; proximal end of right tibia. From a middle level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-3, depth-85 cm., date 31.1.63.
Broken third phalanx. From a late level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-2, depth-66 cm., date 21.1.65.
Broken thoracic vertebra; broken cervical vertebra-1; fragment of lumber vertebra-3; distal end of metacarpal. From a late level of Period II.

KLB-2, locus-XA-12, Qd-4, stratum-3.
First phalanx. From a late level of Period II.

KLB-2, locus-XA-12, Qd-4, stratum-5, depth-1.18 m., date 20.2.65.
Proximal end portion of radius; distal end of portion of left radius; left astragalus; first phalanx; second phalanx; broken ramus of mandible; proximal portion of ulna; first phalanx-2. From a late level of Period II.

KLB-2, locus-XB-16, Qd-2, stratum-3, depth-1.30 m., date 29.12.63.
Proximal end of right femur. From a late level of Period II.

KLB-2, locus-XA-17, Qd-4, stratum-2, depth-13.5. cm.
Upper first molar and third premolar. From a middle level of Period II.

KLB-2, locus-XA-15, 2 and 3, stratum-9, depth-1.62 m., date 25.2.62.
Second phalanx. From a late level of Period II.

KLB-2, locus-XA-13, Qd-1, stratum-4, depth-1.02 cm., date 14.2.65.
Upper left second and third molars; upper right second, third molars; lower third molar; first phalanx-2; second phalanx-2. From a late level of Period II.

KLB-2, locus-XA-12, Qd-4, stratum-4, depth-1.05 m., date 20.2.65.
Caudal vertebra; broken rib; left lunate; upper left third molar; proximal end of right radius. From a late level of Period II.

KLB-2, locus-XA-2, stratum-8, depth-1.35 m., date 9.3.65.
Upper right third molar; right scapho-cuboid; upper right portion of maxilla with second and first molar; third and second pre-molar; fragment of maxilla with upper right second and first molars. From a late level of Period II.

KLB-2, locus-XA-15, trench 2 and 3, stratum-7, depth-1.62, date 27.2.65.
Proximal end of left metatarsal; proximal end of right metatarsal; distal end of left metatarsal; distal end of right humerus; broken right radius. From a late level of Period II.

KLB-2, locus-XB-6, Qd-2, stratum-4, depth-75 cm., date 2.2.67.
Fragment of head of humerus; right epiphysis of radius; fragment of the head of right femur; distal fragment of right radius. From a late level of Period II.

KLB-2, locus-XA-12, Qd-2, stratum-3.
Left astragalus; second phalanx. From a late level of Period II.

KLB-2, locus-XB-7, Qd-3, stratum-7S, depth-1.80 m.
Fragments of the zygomatic process of temporal bone-8. From a late level of Period II.

KLB-2, locus-XA-12, Qd-4, stratum-2, depth-35 cm., date 11.2.65.
Third phalanx; left traperozoid and magnum; distal fragment of left tibia of a young one without epiphysis. From a late level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-5, depth-1.20 m., date 4.2.65.
Fragments of ribs-2; broken right radius; second phalanx. From a late level of Period II.

KLB-2, locus-XA-12, Qd-2, stratum-4, depth-75-90 cm., date 14.1.65.
Fragment of anterior portion of a mandible; upper second, third molars; lower third molar. From a late level of Period II.

KLB-2, locus-XA-15, trench 2 and 3, stratum-7, depth-1.16 m.
Broken spinous process of cervical vertebra; broken cervical vertebra-4; broken cervical vertebra-4; broken lumber vertebra-3; distal end of metatarsal. From a late level of Period II.

KLB-2, locus-XA-15, Qd-4, trench 2 and 3, stratum-7, depth-1.62 m., date 25.2.63.
Right scapho-cuboid; left scapho-cuboid; right scaphoid; left scaphoid; left unciform; right astragalus; right trapezoid and magnum; first phalanx-3; second phalanx-3; fragment of third phalanx-1; distal epiphysis of right tibia; distal epiphysis of metatarsal; right upper first molar-2; upper second pre-molar of an young one-2. From a late level of Period II.

KLB-2, locus-XA-6-XA-7, stratum-1 to 8, date 23.2.63.
Fragment of atlas vertebra. From a late level of Period II.

KLB-2, locus-XA-10, Qd-4, stratum-7, depth-1.30 cm., date 6.1.65.
Right trapezoid and magnum. From a late level of Period II.

KLB-2, locus-E-3, Qd-4, D-3, Qd-3, stratum-2, date 14.2.65.
Sixth cervical vertebra-1 (broken); seventh cervical vertebra without spinous process. Fragment of rib with head and tubercle. From a late level of Period II.

KLB-2, locus-B-8, Qd-1, stratum-3, depth-0.90, date 30.1.
Fragment of left horizontal ramus of mandible with first and third molars and second and third broken pre-molars; fragments of right horizontal ramus of mandible with all teeth-3. From a late level of Period II.

KLB-2, locus-D-8, Qd-4, stratum-2, depth-0.25 m., date 26.12.62.
Right accessory bone; broken right scaphoid; broken right lunate. From a late level of Period II.

KLB-2, locus-XA-7, stratum-2, depth-1.5 m.
Fragment of horn-core; second phalanx-1; left accessory bone; left scapho-cuboid. From a late level of Period II.

KLB-2, locus-XA-5, Qd-2, stratum-5, depth-1.43 cm., date 9.2.63
Fragment of proximal end of right metacarpal. From a late level of Period II.

KLB-2, locus-XA-9, Qd-1, stratum-4, depth-0.5 m., date 19.10.76.
Second phalanx. From a late level of Period II.

KLB-2, locus-E-1, Qdt-1, stratum-12, depth-2.13 m., date 20.2.62.

Fragment of proximal end of left radius. From a middle level of Period II.

KLB-2, locus-YF-12, Qd-3, sealed by Layer-2, date 6.1.65.
Left unciform. From a late level of Period II.

KLB-2, locus-XA-15, trench 2 and 3, stratum-7, depth-1.62. m., date 26.2.63.
Portion of illium of pelvic girdle-2; fragment of pubis of the pelvic girdle; fragments of pelvic girdle-2; right tibia; fragment of proximal end of right scapula. From a late level of Period II.

KLB-2, locus-XA-17, Qd-4, Layer -2.
Right scaphoid bone; fragments of ribs-2; right lunate bones-3; second upper pre-molar; first phalanx; fragment of the distal end of metacarpal. From a late level of Period II.

KLB-2, locus-XA-15, A. 2 and 3, stratum-7, depth-1.62 m., date 27.2.63.
Broken vertebra i.e. atlas vertebra-2; axis vertebra-2; lumber vertebra-2; sacral and cervical vertebra-3 (third, fourth & fifth); third phalanx; first phalanx; right scapho-cuboid; broken olecranon process of right ulna; broken horn-core; fragment of proximal end of right humerus. From a late level of Period II.

KLB-2, locus-XA-13, Qd-1, stratum-6, depth-1.35 cm., date 17.2.63.
First phalanx. From a late level of Period II.

KLB-2, locus-XA-12, Qd-4, stratum-3, depth-10 cm., date 14.2.65.
Second phalanx. From a late level of Period II.

KLB-2, locus-XA-9, S.W. Sector, stratum-20, date 6.4.62.
Right lunate; fragment of a rib; left scaphoid. From an early level of Period II.

KLB-2, locus-E-1, Qd-1, stratum-13, date 21.2.62.
Fragment of a horn; fragment of a rib with head and tubercle; left lateral malleolus. From a middle level of Period II.

KLB-2, locus-XA-8, S.E. Sector, stratum-10, date 10.3.62.
Head fragment of a right femur; broken epiphysis of right radius. From a middle level of Period II.

KLB-2, locus-XA-8, stratum-20, depth-3.15 m., date 24.3.62.
Second phalanx; fragment of pelvis. From an early level of Period II.

KLB-2, locus-YA-1, S.E. Sector, stratum-1, date 18.2.62.
Fragment of left scapula with glenoid cavity. From a late level of Period II.

KLB-2, locus-XA-6, stratum-4, depth-1.65 m.
Fragment of right scapula with glenoid cavity; left astragalus; fragment of horn-core. From a late level of Period II.

KLB-2, locus-XC-6, Qd-3, stratum-1, depth-.10 m., date 24.2.63.
Second phalanx. From a late level of Period II.

KLB-2, locus-XB-8, stratum-2, depth-1.20 m.
Head fragment of right femur. From a late level of Period II.

KLB-2, locus-XA-6, road-2, depth-43 cm., date 18.12.62.
Second phalanx; fragment of proximal end of right femur with head and great trochoute. From a late level of Period II.

KLB-2, locus-XA-6, stratum-5, depth-2.5 m.
Fragment of proximal end of the left radius. From a late level of Period II.

KLB-2, locus-XA-8, S.E. Sector, stratum-22, depth-3.65 to 3.88 m., date 14.12.62.
Fragment of right horizontal ramus of mandible. From an early level of Period II.

KLB-2, locus-XA-7- XA-8, stratum-1 to 8, date 4.3.63.
Distal fragment of left humerus; distal fragment of right metatarsal; fragment of proximal part of right radius; fragment of distal part of right femur with only medial condyle. From a late level of Period II.

KLB-2, locus-XA-8, S.E. Sector, stratum-25, depth-4.40 m., date 2.1.63
Epiphysis of distal part of left radius. From an early level of Period II.

KLB-2, locus-B-7, Qd-3, stratum-12, date 20.2.64.
Fragment of right scapula with glenoid cavity. From a middle level of Period II.

KLB-2, locus-ZE-2, pit-17, date 23.2.62.
Fragment of a rib with head and tubercle. From a middle level of Period II.

KLB-2, locus-XA-9, N.W. Sector, stratum-13, date 5.3.62.
Broken incisor tooth. From a middle level of Period II.

KLB-2, locus-XC-8, Qd-4, stratum-2, depth-0.50 cm., date 19.2.63.
Distal fragment of left humerus. From a late level of Period II.

KLB-2, locus-E-1, stratum-20.
First phalanx; third phalanx. From an early level of Period II.

KLB-2, locus-D-9, Qd-2, stratum-4, depth-90 cm., date 19.1.64.
Third phalanx. From a late level of Period II.

KLB-2, locus-D-9, Qd-2, stratum-2, depth-3.60 m.
Distal fragment of left femur. From a late level of Period II.

KLB-2, locus-XB-8, stratum-2E, depth-0.30, date 27.12.62.
Broken upper right second molar-2. From a late level of Period II.

KLB-2, locus-XA-7, Qd-1, stratum-6, depth-1.00 m.
Caudal vertebra. From a late level of Period II.

KLB-2, locus-XA-7, stratum-21, depth-5.80 m.
Fragment of right scapula with glenoid cavity. From an early level of Period II.

KLB-2, locus-XA-6, stratum-22, depth-6.40 m.
Fragments of proximal end of left radius. From an early level of Period II.

KLB-2, locus-XA-6, stratum-14, depth-4.42 m.
Fragments of proximal end of right radius; fragments of distal end of left humerus; fragment of proximal end of metacarpal. From a middle level of Period II.

KLB-2, locus-XA-6, stratum-3, depth-.97 m.
Second phalanx; fragment of proximal end of right humerus of a young one; fragment of head of right femur. From a late level of Period II.

KLB-2, locus-XA-6, stratum-17, depth-4.17 m., date 26.3.62.
Broken left astragalus. From an early level of Period II.

KLB-2, locus-XA-9, S.W. Sector, stratum-22.
Fragment of left horizontal ramus of mandible with first and third premolars. From an early level of Period II.

KLB-2, locus-A-8, stratum-18, depth-3.10 m.
First phalanx; fragment of a rib; fragment of cervical vertebra. From a early level of Period II.

KLB-2, locus-XA-8, stratum-2, depth-3.20 m., date 23.3.63.
Fragment of a rib; broken first left upper

molar. From a late level of Period II.

KLB-2, locus-XA-7, stratum-2, depth-1 m., date 28.2.62.
Broken first phalanx; broken second phalanx. From a late level of Period II.

KLB-2, locus-XB-8, Qd-2, stratum-4, depth-1.65 m., date 1.1.63.
Fragment of distal end of right humerus-2; fragments of distal end of left femur of a young one. From a late level of Period II.

KLB-2, locus-XA-9, Qdt-1, stratum-14, depth-2.40 m., date 6.1.63.
First phalanx. From a middle level of Period II.

KLB-2, locus-XB-7, Qd-3, stratum-7S, depth-1.80 m., date 23.1.62.
Second left upper premolar; left cuneiform; right lunate. From a late level of Period II.

KLB-2, locus-XA-9, stratum-3.
Fragment of the blade of scapula; sacrum vertebra. From a late level of Period II.

KLB-2, locus-XA-6, road-2, depth-50 cm., date 18.12.62.
Left cuneiform; right cuneiform; right astragalus; fragment of second left upper molar. From a late level of Period II.

KLB-2, locus-XB-9, Qd-2, stratum-2N, depth-0.37 m., date 31.1.63.
Broken second phalanx; right wing fragment of sacrum vertebra. From a late level of Period II.

KLB-2, locus-XA-7, stratum-22, depth-6.10 m., date 18.3.62.
Second phalanx; fragment of distal end of right radius; fragments of rib; thoracic vertebra-1; cervical vertebra-3. From an early level of Period II.

KLB-2, locus-XA-6, stratum-5, depth-1.42 m., date 25.12.62.
Proximal end of left metacarpal. From a late level of Period II.

KLB-2, locus-ZE-1, stratum-2W, date 28.2.62.
First phalanx; second phalanx; broken caudal vertebra; fragment of proximal end of left radius; fragment of rib with head and tubercle-2. From a late level of Period II.

KLB-2, locus-XA-6, road-6, depth-1.09 m.
Left cuneiform-2; broken thoracic vertebra; fragment of head of left humerus; fragment of proximal fragment of metacarpal; fragment of rib. From a late level of Period II.

KLB-2, locus-D-9, Qd-2, stratum-9, depth-1.8 m.
Second phalanx. From a late level of Period II.

KLB-2, locus-B-7, Qd-3, stratum-10x, depth-2.50 m., date 25.12.63.
Right calcaneum. From a middle level of Period II.

KLB-2, locus-XA-6, stratum-5, depth-1.45 m.
Broken left lower third pre-molar; fragment of right calcaneum; distal fragment of right tibia; right astragalus; distal fragment of right humerus. From a late level of Period II.

KLB-2, locus-XA-6, stratum-6, depth-1.85 m., date 3.2.63.
Right calcaneum; right astragalus; left scaphocuboid; right scapho-cuboid; proximal fragment of left femur. From a late level of Period II.

KLB-2, locus-XB-7, Qd-4, stratum-4, depth-0.90 m.
Fragment of rib-2. From a late level of Period II.

KLB-2, locus-XB-8, Qd-1, depth-0.45 m.
Distal fragments of right femur. From a late level of Period II.

KLB-2, locus-XA-9, S.W. Sector, stratum-17.

Right calcanuem; third phalanx. From a middle level of Period II.

KLB-2, locus-B-8, Qd-4, stratum-4, depth-1.40 m., date 25.1.63.
Fragment of left trapezoid and magnum; second phalanx. From a late level of Period II.

KLB-2, locus-XA-7, Qd-1, stratum-6.
First phalanx; second phalanx; caudal vertebra. From a late level of Period II.

KLB-2, locus-XB-6, Qd-2, stratum-3, depth-65 cm.
Fragment of a rib; left scapho-cuboid. From a late level of Period II.

KLB-2, locus-XB-7, Qd-1, pit-1, stratum-5A.
Distal fragment of right humerus. From a late level of Period II.

KLB-2, locus-XA-9, road No. 1 and 2, stratum-19, depth-3.85 m.
Second phalanx; third right lower pre-molar. From a middle level of Period II.

KLB-2, locus-XA-6, stratum-5, depth-1.80 m.
Distal fragment of right radius; fragment of left calcaneum. From a late level of Period II.

KLB-2, locus-XA-15, trench 2 and 3, stratum-7, depth-1.62 m., date 25.2.63.
Fragment of femur-5; proximal fragment with shaft of right femur. From a late level of Period II.

KLB-2, locus-XB-7 and XB-8, depth-1.93 m., date 27.2.63.
Proximal end of left metatarsal; epiphysis of right radius; fragment of left femur with head; fragment of right radius without epiphysis; second phalanx; uppers first molar; third premolar. From a late level of Period II.

Ovis orientalis vignei Blyth.
KLB-1, locus-XC-1, Qd-2, stratum-4A, depth-1.35 m., date 9.1.63.
Left calcaneum; right metacarpal without distal epiphysis; fragment of right horizontal ramus of mandible with third premolar first, second errupted, along with third molar. From a late level of Period II.

KLB-1, locus-YF-2, Qd-3, stratum-5, depth-60 cm., date 25.1.63.
Distal fragment of right femur without condyle; fragment of the shaft of left humerus; fragment of left radius with olecranon process and semilunar notch. From a late level of Period II.

KLB-1, locus-ZA-1, Qd-1, stratum-1, debris, depth-90 cm. to 1 m., date 27.1.65.
Left astragalus; distal fragment of right humerus. From a late level of Period II.

KLB-1, locus-ZA-1, Qd-4, foundation fences of wall.
Fragment of axis vertebra; distal fragment of left humerus. From a late level of Period II.

KLB-1, locus-B-5, Qd-5, stratum-3, depth-0.47 m.
Fragments of horn-core-2. From a late level of Period II.

KLB-1, locus-4A1, Qd-1, stratum-blank 4A1-ZA-7.
Right upper first molar (Broken); fragment of right third lower molar. From a late level of Period II.

KLB-1, locus-XD-4, Qd-3.
Distal fragment of left femur. From an unstratified level.

KLB-1, locus-YA-1, Qd-1, banlk, YA-1 to ZA-1, date 30.12.62.
Proximal fragment of left metatarsal; distal fragment of left femur without epiphysis. From an unstratified level.

KLB-1, locus-YG-2, Qd-4, stratum, surface, 9.2.63.
Distal fragment of left tibia without epiphysis. From a late level of Period II.

KLB-1, locus-XC-1, Qd-2, stratum-17, date 31.1.63.
Distal fragment of left ulna. From a middle level of Period II.

KLB-1, locus-YC-2, Qd-4, stratum-3, depth 2.40 m., date 22.12.62
Broken horn-core. From a late level of Period II.

KLB-1, locus-XE-2, Qd-2, stratum-3.
Distal fragment of right tibia; fragment of right pelvis with acetabulum. From a late level of Period II.

KLB-1, locus-ZD-8, Qd-1.
Fragment of distal end of right Metacarpal; fragment of distal end of tibia. From an unstratified level.

KLB-1, locus-XE1, Qd-2, stratum-2B, depth .85 m., date 3.1.63.
Proximal fragment of right radius. From a late level of Period II.

KLB-1, locus-YF-12, Qd-9, stratum-2, depth 95 cm., date 4.1.65.
Left calcaneum; cervical vertebra; fragment of rib; left upper second and first molars. From a late level of Period II.

KLB-1, locus-XF-2, Qd-2, stratum-3, depth 35 cm., date 13.12.63.
Cervical vertebra; fragment of a rib; fragment of the shaft of right ilium with portion of acetabulum; lumbar vertebra without spine and transverse process; fragment of horizontal ramus of right mandible with first and third molar and premolar; broken axis vertebra. From a late level of Period II.

KLB-1, locus-XE-2, Qd-2, stratum-5, date 7.2.62.
Fragment of the shaft of femur. From a late level of Period II.

KLB-1, locus-YA-8, Qd-2, stratum-3, date 3.3.62.
Distal fragment of humerus; thoracic vertebra; upper jaw tooth; fragment of rib; lumbar vertebra; first phalanx. From a late level of Period II.

KLB-1, locus-YA-8, Qd-4, date 4.2.65.
Metacarpal; distal fragment of humerus-2; first phalanx. From an unstratified level.

KLB-1, locus-2A-8, Qd-4, stratum-dump, date 5.2.65.
Fragment of ribs; distal portion of right metacarpal. From a late level of Period II.

KLB-1, locus-YA-8, Qd-2, stratum-5, date 5.3.65.
Fragment of right metatarsal. From a late level of Period II.

KLB-2, locus-XA-6, Road-11, depth 1.4 m.
Broken lumbar vertebra without tranverse process; distal fragment of left humerus. From a late level of Period II.

KLB-2, locus-ZE-1, stratum-2W, date 28.2.62.
Distal fragment of right radius. From a late level of Period II.

KLB-2, locus-XA-7, Qd-4, stratum-12, depth 2.65 m., date 5.3.62.
Broken thoracic vertebra; broken cervical vertebra. From a middle level of Period II.

KLB-2, locus-XA-6, Road-2, stratum-, depth 50 cm., date 18.12.62.
Distal fragment of right humerus; first upper left molar; second upper left premolar; second lower left premolar. From a late level of Period II.

KLB-2, locus-XA-9, Qdt-1, stratum-14, depth 2.40 m., date 6.1.63.
First phalanx; second phalanx. From a middle level of Period II.

KLB-2, locus-B-8, Qdt-4, stratum-6, depth 1.70 cm., date 29.1.63.

First phalanx. From a late level of Period II.

KLB-2, locus-XA-9, stratum-17, depth 3.50 cm., date 11.1.63.
Thoracic vertebra with broken spinal; fragment of left scapula with glenoid cavity; fragment of horizontal ramus of left mandible with first premolar; distal fragment of left radius without epiphysis. Fr[illegible] a middle level of Period II.

KLB-2, locus-XA-6, stratum-22, depth 6.40 m.
Distal fragment of left humerus with medial and lateral condyles. From an early level of Period II.

KLB-2, locus-XA-6, stratum-17, depth 5.17 cm.
First phalanx. From a middle level of Period II.

KLB-2, locus-XA-15, Qd-3, stratum-3.
Fragment of proximal end right metatarsal. From a late level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-3, depth 1.05 m.
First phalanx. From a late level of Period II.

KLB-2, locus-XA-10, Qd-4, stratum-7, depth 1.30 m., date 6.1.67.
First phalanx. From a late level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-5, depth 1.40 cm., date 6.2.65.
Distal fragment of right humerus with coronoid and medial and lateral condyles; right astragalus. From a late level of Period II.

KLB-2, locus-XA-6, stratum-16, depth 4.75 m., date 26.3.62.
Distal fragment of right humerus. From a middle level of Period II.

KLB-2, locus-D-9, Qd-2, stratum-9, depth 1.8 m.
Broken right scapula. From a late level of Period II.

KLB-2, locus-B-7, Qd-3, stratum-10, depth 2.50 m., date 25.12.63
Left astragalus; fragment of right scapula with glenoid cavity. From a late level of Period II.

KLB-2, locus-XA-6, road-4, depth 1.09 m.
Broken thoracic vertebra; distal fragment of right metacarpal; distal fragment of right humerus. From a late level of Period II.

KLB-2, locus-XA-1, Qd-1, pt-2, stratum-2, date 8.4.62.
Right metacarpal. From a late level of Period II.

KLB-2, locus-XA-9, S.E. Sector, stratum-13, date 21.2.62.
Broken first upper left molar. From a middle level of Period II.

KLB-2, locus-ZE-2, pit-17.
Broken first phalanx. From a late level of Period II.

KLB-2, locus-XA-9, S.E. Sector, stratum-8, date 13.2.62.
Left astragalus; fragment of axis vertebra. From a late level of Period II.

KLB-2, locus-XA-12, Qd-2, stratum-3, depth 66 cm., date 24.1.65.
First phalanx; distal end of shaft of humerus. From a late level of Period II.

KLB-2, locus-XA-7, Qd-1, stratum-6, depth 1.00 m.
Fragment of right pelvic. From a late level of Period II.

KLB-2, XA-8, Qd-3, stratum-9, depth 2.20 m.
Right upper third molar. From a late level of Period II.

KLB-2, locus-XA-8, Qd-1, stratum-8, depth

1.85 m., date 23.12.62.
First phalanx. From a late level of Period II.

KLB-2, locus-XA-9, S.W. Sector, stratum-12.
Distal fragment of left humerus. From a middle level of Period II.

KLB-1, locus-ZD-8, Qd-1, stratum-5, depth 55 cm., date 23.12.65.
Horn core; left astragalus; upper left second and third molar. From a late level of Period II.

KLB-1, locus-ZA-8, Qd-4, stratum-7, depth 1.35 m.
Proximal end of left femur; distal end shaft of left tibia. From a late level of Period II.

KLB-1, locus-T4-9, stratum-nil, depth 1.35 m.
Broken left illium with acetabulum. From a late level of Period II.

KLB-1, locus-ZD-1, stratum-nil, depth 1.20 m., date 3.4.62.
Distal fragment of left tibia; proximal fragment of left femur with head, greater trochantur and trochanteric fossa. From a late level of Period II.

KLB-1, locus-B-5, Qdt-1, stratum-3, depth 0.47 m., date 27.2.63.
Fragment of horn-2. From a late level of Period II.

KLB-1, locus-YC-2, Qd-4, stratum-1A, depth 1.05 m., date 16.2.62.
Lumbar vertebra without transverse process. From a late level of Period II.

KLB-1, locus-D-2, Qd-1, stratum-1, depth 10 cm. to 40 cm., date 19.2.63.
Distal fragment of right radius; proximal fragment of right femur. From a late level of Period II.

KLB-1, locus-YA-1, Qd-1, stratum-Banlk, date 29.12.62.
Proximal fragment of right metatarsal; proximal fragment of left tibia. From an unstratified level.

KLB-1, locus-YF-2, Qd-2, stratum-7, depth 1.40 m., date 14.12.63.
Fragment of right pelvis. From a late level of Period II.

KLB-1, locus-YA-8, Qd-2, stratum-5, date 5.3.65.
Atlas vertebra; distal fragment of right tibia; upper right second molar; distal fragment of left humerus of an young one; horizontal ramus of mandible with third broken molar. From a late level of Period II.

KLB-1, locus-YF-2, Qd-2, stratum-22.
Proximal fragment of left femur; distal fragment of right tibia; fragment of right astragalus; distal fragment of right ramus; left calcaneum; fragment of right scapula with glenoid cavity. From an early level of Period II.

KLB-2, locus-XE-2, Qd-2, stratum-3.
Distal fragment of right tibia; fragment of right pelvis with acetabulam. From a late level of Period II.

KLB-1, locus-YF-12, Qd-3, stratum-dump, depth 95 cm., date 6.1.65.
Distal end of right tibia; lumbar vertebra; distal end of left humerus; fragment of right scapula with glenoid cavity and portion of neck. From a late level of Period II.

KLB-1, locus-C-1, Qd-1, stratum-1, date 15.12.62.
Fragment of horn; distal fragment of left tibia; distal fragment of right tibia; first phalanx-5; fragment of left calcaneum. From a late level of Period II.

KLB-1, locus-XE-1, Qd-1, stratum-3, date 7.12.63.
Distal fragment of left tibia; fragment of axis vertebra. From a late level of Period II.

KLB-1, locus-YF-2, Qd-3, stratum-2A, date

16.12.62.
Anterior fragment of left horizontal ramus of mandible; broken thoracic vertebra. From a late level of Period II.

KLB-1, locus-XA-8, S.E. Sector, stratum-22, depth 3.70 m., date 16.12.62.
Proximal fragment of left radius; fragment of a rib; distal fragment of left tibia; fragment of right pelvis with acetabulum; right astragalus; proximal fragment of left humerus; left calcaneum without epiphysis. From a late level of Period II.

KLB-1, locus-XB-1, Qd-3, stratum-3.
Proximal fragment of right tibia. From a late level of Period II.

KLB-1, locus-YF-2, Qd-3, stratum-5.
Distal fragment of right humerus. From a late level of Period II.

KLB-1, locus-XC-1, Qd-2, pit-1.
Distal fragment of left tibia; fragment of right calcaneum; fragment of left calcaneum; fragment of a rib; distal fragment of right humerus; distal fragment of right metacarpal. From a late level of Period II.

KLB-1, locus-XC-1, Qd-2, pit-1.
First phalanx. From a late level of Period II.

KLB-2, locus-XB-8, stratum-2, depth 1.20 m., date 26.12.62.
Fragment of a rib. From a late level of Period II.

KLB-2, locus-XA-8, stratum-23.
Left astragalus. From an early level of Period II.

KLB-2, locus-XA-8, Qd-1, stratum-4, depth 50 cm.
Fragment of the shaft of metatarsal. From a late level of Period II.

KLB-2, locus-ZE-1, stratum-1W, date 27.2.62.
Proximal fragment of left radius. From a late level of Period II.

KLB-2, locus-XA-7, Qd-4, stratum-2, depth 0.63 m.
Distal fragment of left femur; fragment of left scapula with glenoid cavity. From a late level of Period II.

KLB-2, locus-XA-7, Qd-3, stratum-3, depth 1.00 m.
Right horn. From a late level of Period II.

KLB-2, locus-XA-7, Qd-4, stratum-2.
Distal fragment of right metatarsal; left astragalus; distal fragment of left humerus. From a late level of Period II.

KLB-2, locus-XA-7, Qd-4, stratum-3, depth 2.90 m.
Fragment of right lower third molar; proximal fragment of right radius; distal fragment of right radius; right astragalus. From a late level of Period II.

KLB-2, locus-XA-7, Qd-1, stratum-2, depth 1 m.
Distal fragment of right tibia-1; fragment of a rib; distal fragment of right humerus; proximal fragment of right radius; broken thoracic vertebra. From a late level of Period II.

KLB-2, locus-XA-6, stratum-4, depth 1.16 m., date 23.12.62.
Axis vertebra; fragment of right scapula with glenoid cavity; distal fragment of right tibia; distal fragment of left femur; thoracic vertebra with broken spine; fragment of the shaft of metatarsal; proximal fragment of right radius. From a late level of Period II.

KLB-2, locus-XA-6, stratum-5, depth 1.46 m.
Left calcaneum; distal fragment of left humerus. From a late level of Period II.

KLB-2, locus-XA-8, stratum-20, depth 3.15 m., date 24.3.62.
Fragment of left scapula with glenoid cavity;

coronoid process and a portion of a neck. From an early level of Period II.

KLB-2, locus-XA-6, Road-2, depth 85 cm. First phalanx. From a late level of Period II.

KLB-2, locus-XA-6, stratum-9, depth 3.10 m. Fragment of sacrum vertebra; fragment of cervical vertebra. From a late level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-2, depth 85 cm., date 31.1.65.
Fragment of distal end of femur. From a late level of Period II.

KLB-2, locus-C-6, Qd-1, stratum-2, depth 7 cm., date 2.1.65.
Fragment of right ilium of pelvic bone; first phalanx. From a late level of Period II.

KLB-2, locus-XA-12, Qd-4, stratum-2, depth 35 cm., date 11.2.65.
Fragment of left ilium; right calcaneum. From a late level of Period II.

KLB-2, locus-C-5, Qd-3, stratum-5, depth 56 cm., date 21.1.63.
Horn (broken at the tip). From a late level of Period II.

KLB-2, locus-XA-15, trench 2 and 3, stratum-7, depth 1.62 m., date 22.2.63.
Right calcaneum; left astragalus. From a late level of Period II.

KLB-2, locus-E2, Qd-1, stratum-14, depth 1.60 m., date 28.1.62.
Complete horn (slightly broken at the tip). From a middle level of Period II.

KLB-2, locus-XA-8, S.W. Sector, stratum-2, date 12.3.62.
Fragment of skull with occipital and parietal portion. From a late level of Period II.

KLB-2, locus-XA-8, S.E. Sector, stratum-22, depth 3.65-3.88 m., date 14.12.62.
Distal fragment of metacarpal. From an early level of Period II.

KLB-2, locus-XB-8, Qd-2, stratum-4, depth 1.65 m., date 1.1.63.
Proximal fragment of right radius and ulna. From a late level of Period II.

KLB-2, locus-XA-6, stratum-5, depth 2.5 m. Fragment of left scapula with glenoid cavity and portion of neck. From a late level of Period II.

KLB-2, locus-YA-1, Qd-4, dump-1, date 12.1.63.
Distal fragments of left radius. From a late level of Period II.

KLB-2, locus-XA-6, Road-3, depth 63-76 cm., date 20.12.62.
Left calcaneum; first phalanx-2; fragment of left scapula with glenoid cavity; thoracic vertebra with broken spine; proximal fragment of right radius; distal fragment of left radius; distal fragment of right humerus; fragment of left humerus; fragment of right astragalus; fragment of left scapula with glenoid cavity. From a late level of Period II.

KLB-2, locus-XA-9, Qd-1 and 2, stratum-20, depth 4.00 m.
Distal fragment of right metatarsal. From an early level of Period II.

KLB-2, locus-XA-9, stratum-12.
Left calcanuem. From a middle level of Period II.

KLB-2, locus-XA-5, Qd-1, stratum-2.
Distal fragment of metacarpal. From a late level of Period II.

KLB-2, locus-D-8, Qd-3, stratum-2, depth 0.30 m.
Fragment of right scapula with glenoid cavity. From a late level of Period II.

KLB-2, locus-XA-9, Road 1 and 2, stratum-19, depth 3.85 m.
Distal fragment of left humerus; fragment of right horizontal ramus of mandible with second, third premolars and first molar; distal fragment of right tibia; fragment of left scapula with glenoid cavity and neck portion; fragment of left horizontal ramus of mandible with one erupted molar. From an early level of Period II.

KLB-2, locus-XA-7, stratum-8, depth 2.20 m.
Anterior fragment of right horizontal ramus mandible. From a late level of Period II.

KLB-2, locus-XB-7, Qd-1, stratum-Pit no.-1, sealed by 5A, date 12.2.63.
Seventh cervical vertebra; distal fragment of metacarpal-2. From a late level of Period II.

KLB-2, locus-XB-6, Qd-2, stratum-3, depth 65 cm.
Proximal fragments of right femur with head; left calcaneum; distal fragment of right tibia. From a late level of Period II.

KLB-2, locus-A-8, S.W. Sector, stratum-17, date 1.4.62.
Fragment of left tibia. From a middle level of Period II.

KLB-2, locus-XA-9, S.W. Sector, stratum-14, date 26.2.62.
Distal fragment of right humerus. From a middle level of Period II.

KLB-2, locus-XA-6, stratum-6, depth 2.60 m., date 19.3.62.
Lumbar vertebra. From a late level of Period II.

KLB-2, locus-E-1, stratum-20.
Proximal fragment of right femur. From an early level of Period II.

KLB-2, locus-XA-17, stratum-14.
First phalanx; broken thoracic vertebra; fragment of left scapula with glenoid cavity; proximal fragment of left femur; distal fragment of left humerus; distal fragment of right humerus. From a middle level of Period II.

KLB-2, locus-B-7, Qd-3, stratum-3, depth .95 m., date 20.12.62.
Distal fragment of right humerus; broken lumbar vertebra; lumbar vertebra; distal fragment of left radius; first phalanx; fragment of axis vertebra; broken sacrum. From a late level of Period II.

KLB-2, locus-E-3, Qd-4, D-3, Qd-4, stratum-2, depth - E-2.70 m., D4- 9.90 - 0.60 m., date 14.2.65. From a late level of Period II.
Left astragalus; fragment of right scapula; fragment of distal end of left humerus; broken proximal end of left scapula; right calcaneum; broken mandible with first molar and third premolar; broken mandible-2. From a late level of Period II.

KLB-2, locus-ZE-1, stratum-5, date 4.2.62.
First phalanx of a young one; right calcaneum; distal fragment of left tibia; distal fragment of metatarsal. From a late level of Period II.

KLB-2, locus-XA-6, stratum-3, depth 1.17 m.
Fragment of left calcaneum; distal fragment of right radius. From a late level of Period II.

KLB-2, locus-XB-9, Qd-1, stratum-5, date 23.1.63.
Fragment of right scapula with glenoid cavity and portion of neck. From a late level of Period II.

KLB-2, locus-D-9, Qd-3, stratum-2, depth .55 m., date 18.1.64.
Broken thoracic vertebra; proximal fragment of left radius; broken third right molar; proximal fragment of right metatarsal. From a late

level of Period II.

KLB-2, locus-B-5, Qdt-1, stratum-3, depth .70 m.
Right metatarsal without distal epiphysis. From a late level of Period II.

KLB-2, locus-YA, Qd-4, stratum-dump-1, depth 1.3 m.
Distal fragment of right humerus; fragment of pelvic bone; fragment of the shaft of femur; pubis portion of right pelvis; distal fragment of right tibia; fragment of the shaft of metacarpal; fragment of right upper second molar. From a late level of Period II.

KLB-2, locus-XA-9, Qd-3, stratum-16, S.E. Sector, date 23.2.62.
Broken lumbar vertebra; fragment of rib-2; first phalanx; shaft of the left radius; fragment of illium with acetabulum of right pelvic girdle-3, proximal end of left scapula with glenoid cavity; distal end of left metatarsal. From a middle level of Period II.

Capra hircus aegaqrus Erxl.
Fragment of the shaft of tibia (charred); left upper second molar. From an early level of Period I.

KLB-1, locus-ZD-2, stratum-6.
Fragment of a rib. From an early level of Period I.

KLB-1, locus-XA-2, stratum-10.
Broken upper second molar. From an early level of Period II.

KLB-1, locus-XC-1, Qd-2, stratum-12, depth 3.65 m., date 25.1.65.
First phalanx. From a middle level of Period II.

KLB-1, locus-ZD-2, stratum-5.
Broken cervical vertebra with two anterior articulum. From a middle level of Period I.

KLB-1, locus-ZE-2, stratum-3, date 3.4.62.
Distal fragment of left tibia. From a late level of Period II.

KLB-1, locus-A1, Qd-1, stratum-11, depth 2.90 m.
Distal fragment of right tibia. From a middle level of Period II.

KLB-1, locus-YA-8, Qd-2, stratum-7, date 7.3.63.
Horn with a portion of skull. From a late level of Period II.

KLB-1, locus-XB-1, Qd-3, stratum-2, depth 1.05 m., date 14.12.62.
Broken right lower third molar and second molar. From a late level of Period II.

KLB-1, locus-B-5, Qd-1, stratum-2, depth 10 m.
Fragment of a horn core. From a late level of Period II.

KLB-1, locus-YA-8, Qd-4, date 4.2.65.
Distal portion of left tibia; distal fragment of humerus. From an unstratified level.

KLB-1, locus-ZB-19, Qd-2, stratum-8, depth 1.50 - 1.80 m., date 23.2.66.
Horn-core. From a late level of Period II.

KLB-1, locus-ZA-8, Qd-4, stratum-7, depth 1.35 m.
Left shaft of the metacarpal; proximal fragment of left scapula. From a late level of Period II.

KLB-1, locus-ZB-8, O-D-Q-stratum-9, depth 1.75 m., date 5.1.66.
Fragment of left distal end of tibia; broken right first molar of upper jaw. From a late level of Period II.

KLB-2, locus-XB-1, Qd-3, stratum-2, depth .50 m., date 10.2.62.
First phalanx. From a late level of Period II.

KLB-2, locus-XA-1, Qd-1, depth 0.35 m., date 16.1.63.
Fragment of horn; fragment of first phalanx. From a late level of Period II.

KLB-2, locus-ZD-2, stratum-7A.
Fragment of axis vertebra. From a late level of Period II.

KLB-2, locus-YF-2, (Qr-3), stratum-3, depth .45 m., date 3.2.63.
Broken thoracic vertebra. From a late level of Period II.

KLB-1, locus-ZD-2, stratum-7.
Distal fragment of right humerus; fragment of left horizontal ramus of mandible of a young one; proximal fragment of right ulna with trochear notch; right third and fourth metatarsals of a young one without epiphysis; proximal end of metacarpal. From a late level of Period II.

KLB-1, locus-ZD-8, Qd-2, pit-1, stratum-8, depth 2.10 cm., date 3.2.65
Right scapula with glendoid cavity; distal fragment of metacarpal; fragment of proximal end of right radius; fragment of rib. From a late level of Period II.

KLB-1, locus-XA-1, Qd-1
Cervical vertebra with anterior articular process and two posterior. From an unstratified level.

KLB-1, XE-2, Qd-2, stratum-2, date 6.2.64 20.12.62.
Broken right calcaneum. From a late level of Period II.

KLB-1, YA-8, Qd-2, stratum-5, date 6.3.65.
Lumbar vertebra; portion of ilium with acetabulum; first phalanx; broken shaft of the left radius; broken shaft of right tibia-2; distal end and shaft of right tibia. From a late level of Period II.

KLB-1, locus-Xe-1, Qd-2, pit-1, stratum-2, date 30.1.63.
Fragment of horizontal ramus of left mandible with first and third molar and third premolar. From a late level of Period II.

KLB-1, locus-YF-12, Qd-3, stratum-dump. Sealed by layer-2, date 6.1.65.
Distal end of right femur with condyles. From a late level of Period II.

KLB-1, locus-B-5, Qd-1, depth 0.50m., stratum-1, date 4.3.63.
Fragment of thoracic vertebra; 1st lower molar-2; 3rd lower molar-2; proximal fragment of right ulna; fragment of right scapula with gllenoid cavity and neck. From a late level of Period II.

KLB-1, locus-YF-2, Qd-2, stratum-2X.
Fragment of left scapula with glenoid cavity. From a late level of Period II.

KLB-2, locus-C-1, Qd-1, stratum-1, depth 70 cm., date 15.12.62.
First phalanx-2. From a late level of Period II.

KLB-2, locus-YF-2, Qd-2, stratum-2Y, depth .20 to 40 cm., date 7.2.63.
Proximal fragment of left radius; distal fragment of left radius; fragment of left humerus. From a late level of Period II.

KLB-2, locus-XA-12, Qd-4, stratum-4, depth 95 cm., date 14.2.65.
Left calcaneum. From a late level of Period II.

KLB-2, locus-XA-17, stratum-13.
Proximal fragment of right tibia without epiphysis; distal fragment of right tibia; thoracic vertebra with broken spine; distal fragment of right metacarpal; proximal fragment of left metacarpal; proximal fragment of left radius. From a middle level of Period II.

KLB-2, locus-XA-11, Qd-2, stratum-4, depth

1.10 m., date 31.12.64.
Proximal fragment of left ulna without olecran. From a late level of Period II.

KLB-2, locus-A-6, Qd-1, stratum-2E, depth 0.10 m., date 25.12.64.
Fragment of the shaft of left tibia; distal frament of left femur; fragment of right horn. From a late level of Period II.

KLB-2, locus-XB-7, Qd-3, stratum-5, depth 1.80 m.
Fragment of the shaft of radius-2. From a late level of Period II.

KLB-2, locus-XA-7, stratum-2, depth 1.5 m.
Fragment of left lower third molar; fragment of a rib with head, neck and tubercle. From a late level of Period II.

KLB-2, locus-XA-6, stratum-6, depth 1.82 m., date 14.12.62.
Fragment of the distal part of left humerus; fragment of the horn. From a late level of Period II.

KLB-2, locus-XA-6, stratum-7, depth 2.00 m., date 3.2.63.
Fragment of the shaft of right tibia. From a late level of Period II.

KLB-2, locus-XA-7, Qd-4, stratum-7.
Distal fragment of right humerus. From a late level of Period II.

KLB-2, locus-XA-13, Qd-1, stratum-nil, depth 1.35 m., date 18 12.65
Distal end of left tibia. From an unstrtified level.

KLB-2, locus-EJ, Qd-nil, stratum-2, date 3.2 65.
Distal end of right tibia; distal end of metatarsal From a late level of Period II

KLB-2, locus-XA-8, Qdt-1, stratum-2, depth 0 25 m
Proximal fragment of right radius From a late level of Period II.

KLB-2, locus-XA-9, Qdt-3 and 4.
Proximal fragment of left metacarpal; proximal fragment of left radius; distal fragment of left humerus; distal fragment of right metatarsal; posterior fragment of left scapula with glenoid cavity. From an unstratified level.

KLB-2, locus-XA-15, Qd-3, depth 10 cm., date 8.1.65.
Upper molar. From a late level of Period II.

KLB-2, locus-XA-9, stratum-3.
Proximal fragment of right radius. From a late level of Period II.

KLB-2, locus-XA-9, stratum-15, depth 2.85 m., date 8.1.63.
Fragment of right scapula with glenoid cavity; first phalanx; distal fragment of right third and fourth metatarsal; vertical ramus of left mandible; fragment of the shaft of metatarsal. From a middle level of Period II.

KLB-2, locus-E-1, Qd-1, stratum-28, depth 7.10 m., date 12.2.62.
Fragment of left horizontal ramus of mandible; broken third molar of the left mandible. From an early level of Period II.

KLB-2, locus-XA-9, stratum-15.
Fragment of a rib; thoracic vertebra-2 fragment; distal fragment of right humerus with lateral anomedid condyle; fragment of the shaft of ilium of left pelvis; proximal fragment of right radius; distal fragment of left femur; proximal fragment of left femur with head. From a middle level of Period II.

KLB-2, locus-XA-6, stratum-6, depth 1.85 m.
Distal fragment of left tibia. From a late level of Period II.

KLB-2, locus-E-1, Qd-1, stratum-31, depth

2.30 m.
Broken third lower molar. From an early level of Period II.

KLB-2, locus-XA-9, S.W. Sector, stratum-17.
Distal fragment of right tibia. From a late level of Period II.

KLB-2, locus-E-1, Qd-1, stratum-19.
Proximal fragment of left ulna with semilunar notch. From an early level of Period II.

KLB-2, locus-A-8, stratum-1, depth 1.35 m.
Distal fragments of left femur; first phalanx; distal fragments of left third and fourth metatarsal; fragment of a rib; fragment of atlas vertebra (charred bone); fragment of thoracic vertebra. From a late level of Period II.

KLB-2, locus-XA-9, S.W. Sector, stratum-13, date 1.3.62.
Proximal fragment of left metatarsal. From a middle level of Period II.

KLB-2, locus-X-7, stratum-20, depth-5.60 m., date 17.3.62.
Broken right calcaenum. From an early level of Period II.

KLB-2, locus-E-1, Stratum-19and18, date 23.3.63.
Right calcaneum. From a middle level of Period II.

KLB-2, locus-XA-6, stratum-5, depth-1.46m., date 26.03.62
Fragment of left scapula with glenoid cavity. From a late level of Period II.

KLB-2, locus-XB-17, Qd-2, stratum-6, depth-2.80 m., date 17.2.66.
Fragments of rib; left calcaneum; left astragalus. From a late level of Period II.

KLB-2, locus-XA-10, Qd-2, stratum-3, depth-0.75m., date 26.12.65.
Proaximal fragment of left scapula with glenoid cavity. From a late level of Period II.

KLB-2, locus-XA-12, Qd-1, stratum-2, depth-42 cm.
Distal end fragment of left femur; distal end shaft of right tibia; left metacarpal. From a late level of Period II.

KLB-2, locus-ZB-8, Qd-2, stratum-19, depth-5 m., date 12.2.65.
Upper molar. From an early level of Period II.

KLB-2, locus-XA-12, Qd-4, stratum-4, depth-1.05 m., date 20.02.65.
Lumbar vertebra; upper second molar. From a late level of Period II.

KLB-2, locus-XA-6, Road-11, depth-1.05 m., date 20.2.65.
Distal fragment of left humerus. From a late level of Period II.

KLB-2, locus-XB-7, Qd-3, stratum-8S, depth-1.90 m., date 5.2.63.
Left calcanerum. From a late level of Period II.

KLB-2, locus-XA-7, Qd-1, stratum-1, depth-2.2 m.
Distal fragment of left humerus of a young one without epighysis; first phalanx; distal fragment of left tibia; broken sacrum vertebra with spines, articular facet, anterior, articular process, superior sacral foramen. From a late level of Period II.

KLB-2, locus-XA-8, QA-8, S.E. Sector, stratum-6, date 2.3.62.
Fragment of thoracic vertebra; distal fragment of right femur; proximal fragment of right femur with head. From a late level of Period II.

KLB-2, locus-XA-12, Qd-4, stratum-3, depth-70 m., date 14.2.65.
Left astragalus; fragment of left scapula with glenoid cavity; distal fragment of left tibia.

From a late level of Period II.

KLB-2, locus-B-6, Qd-4, stratum-9, date 8.3.68.
Horn. From a late level of Period II.

KLB-2, locus-XA-17, Qd-4, stratum-2, depth-13 cm.
Left astragalus-2; proximal fragment of femur; broken distal portion of left tobia; broken distal portion of right tibia; broken lumbar vertebra; fragment of distal end of right humerus. From a late level of Period II.

KLB-2, locus-XA-9, stratum-13.
First phalanx; distal fragment of right femur; proximal fragment of right radius. From a middle level of Period II.

KLB-2, locus-XA-6, stratum-22, depth-6.4 cm.
First phalanx. From an early level of Period II.

KLB-2, locus-XA-6, stratum-14, depth-4.42 m.
Proximal fragment of left metacarpal. From a middle level of Period II.

KLB-2, locus-E-1, stratum-21.
Fragment of left scapula with glenoid cavity; fragment of a horn-core; broken cervical vertebra; fragment of cervical vertebra; broken cervical vertebra. From an early level of Period II.

KLB-2, locus-XA-6, stratum-5, depth-1.70 m.
Distal fragment of right humerus of a young one. From a late level of Period II.

KLB-2, locus-XA-6, stratum-20, depth-5.80 m.
Distal fragment of left humerus; fragment of a rib. From an early level of Period II.

KLB-2, locus-XA-6, Road-4, depth-1.12 m.
Distal fragment of right tibia; distal fragment of left tibia; distal fragment of right humerus. From a late level of Period II.

KLB-2, locus-E-1, stratum-20.
Left calcaneum; fragment of shaft of femur; fragment of right metatarsal. From an early level of Period II.

KLB-2, locus-XA-9, S.E. Stratum-8, date 13.2.62.
Proximal fragment of right tibia without epiphysis. From a late level of Period II.

KLB-2, locus-XA-8, S.W. Sector, stratum-14, date 17.3.62.
Fragment of lower right third premolar. From a middle level of Period II.

KLB-2, locus-ZE-1, stratum-1A.W.
Third phalanx; first phalanx. From a late level of Period II.

KLB-2, locus-ZA-8, stratum-22.
Proximal fragment of left radius. From an early level of Period II.

KLB-2, locus-XA-9, Qd-3, stratum-18, S.E.
Fragment of cervical vertebra with posterior articulation. From a middle level of Period II.

KLB-2, locus-XA-15, Qd-3, stratum-4, date 10.2.65.
Fragment of rib; fragment of distal end of femur. From a late level of Period II.

KLB-2, locus-XA-10, Qd-1, stratum-4, depth-0.75 m., date 2.1.65.
Distal end of tibia. From a late level of Period II.

Boselephus tragocamelus Pallas
KLB-2, locus-XD-1, Qd-1, pit- sealed by (SR).
Fragment of distal end of humerus. From a late level of Period II.

Family CAMELIDAE

Camellus dromedarius Linnaeus

KLB-2, locus-E-2, Qd-4, stratum-Top soil, depth-5 cm., E-3 3.50 cm. E-2-6-10.5 cm. date 29.1.65.

Portion of maxilla with premolar and molar. From a late level of Period II.

KLB-2, locus-ZB-16, Qd-2.

Portion of maxilla with left second and first molars. From an unstratified level.

Camelus sp.

KLB-2, locus-XA-15, Qd-3, stratum-4, date 10.2.65.

Proximal end of humerus; broken distal end of right femur. From a late level of Period II.

KLB-2, locus-XA-15 2 and 3, stratum-7, depth-1.62 cm., date 27.2.65.

Broken lumbar vertebra-3; fragment of lumbar vertebra-3; premolar of young one. From a late level of Period II.

D. KALIBANGAN - IDENTIFICATION OF PLANTS AND SEEDS[1]

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Charcoals from the following twenty-nine samples were examined :-

PLANTS

Early Harappan Level :-

TF-241, *Acacia sp.* (4092+90=4205+95) [KLB-1, XD-1, pit 4 sealed by (2), 2.70 m]..

TF-163, *Tectona grandis* (3910+100).

TF-156, *Dalbergia sp.* (3740+110=3850+110) [KLB-1, XE-1/c-62-63-5, Qd. 1, (2), 0.80 m].

TF-152A, *Tectona grandis* (3615+85=3720+90) [KLB-2, XB-9/c-62-63-18, Qd. 4, (5), 0.80].

PLANTS

Harappan Level :-

TF-440, *Calligonum sp.* [KLB-2, D-7, Qd. 3 (10), 2.17 m].

TF-439, *Ficus sp.* (cf. glomerata or religiosa) KLB-2, C-7, Qd.-3, (6), 1.65 m].

TF-436, *Dalbergia sissoo* (KLB-2, E-2, Qd. 4, (1), 1.42 m].

TF-435, *Boswellia srrta* [KLB-2, E-2, Qd. 4 (5), 1.40 m].

TF-434, *Potamogeton or Nymphaea* [KLB-2, E-2, Qd. 4, (4), 0.97 m].

TF-433, *Tamarix dioica* [KLB-2, XC-9, Qd.2, oven/hearth sealed by (6), 1.45 m].

TF-432, *Morus indica* [KLB-2, XA-15, Qd.3/c/64-65, (7), 1.45 m].

TF-431, *Salvadora persica* (KLB-2, XB-8, Qd.4, (4) 1.30 m).

TF-430, *Terminalia sp.* (KLB-2, C-5, Qd1, (6) 1.80 m).

TF-429, *Dalbergia sp.*

TF-427, *Albizzia lebbeck* [KLB-2, XA-2, Qd. 2, (6S), 1.15 m].

TF-425, *Acacia sp.* [KLB-2, XA-11, Qd. 2, (6), 1.55 m].

TF-423, *Anogeissus latifolia.*

TF-421, *Acacia sp.* (KLB-2, XA-10, Qd.3, (6), 1.45 m).

TF-420, *Dalbergia sissoo* [KLB-2, A-6, Qd. 4/c/64-65, 1(2), 2.5-3.0 m].

TF-152B, *Tectona grandis*, 33615+85 (3720+90).

TF-149, *Dalbergia sp.* (2675+140 [DGA: 6336, KLB-2, ZE-I/c/62-63, - 15, Qd.-1,4(3)].

SEEDS[2] The sample no. Ic, KLB-1/XA 17, Locus-A17, 8.47 x A18, 9.02 depth 2.50, stratum 17, has been found to contain several thousand charred grains of hulled Barley, 50 grains of naked Barley and one seed of Pisum arvense.

In the material preserved at the Central Antiquity Section, Safdarjung, New Delhi, a seed of *Cicer arietium* (Chana) was identified. The impressions on the terracotta cakes are not of Rice but of Barley.

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1 *Indian Archaeology - 1975-76, A Review*, p 87-88

2 *Indian Archaeology - 1972-73, A Review*, p 68